SEE THE FOREST FOR THE TREES: EXAMINING BEST PRACTICE COLLABORATION IN FOREST MANAGEMENT PLANNING PROCESSES

by

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ABSTRACT

In 2012, the US Forest Service created a new planning rule for land management that included the use of collaborative methods and public involvement. Planning rules impact the Forest Service Management Plans for individual National Forests. The 2012 Planning Rule provides a very broadly defined version of collaboration. This thesis seeks to define collaboration using six characteristics of collaboration frequently mentioned in literature. This research also examines documents produced at the federal level of the Forest Service as well as two individual case studies of National Forests that are undergoing the plan revision process using the six factors of best practice collaboration to analyze the documents. Finally, this analysis concludes with recommendations to the Forest Service for better incorporation of best practice collaboration in land management planning.

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CHAPTER 1

HISTORY AND CONTEXT OF THE FOREST MANAGEMENT PLAN AND THE SALMON-CHALLIS AND MANTI-LA SAL NATIONAL FORESTS

1.1 Introduction and Outline

In 2012, the Forest Service created a new planning rule for land management that incorporated the use of collaborative methods and public involvement (US Forest Service, n.d.-n). Planning rules impact the Forest Service Management Plans for individual forests, which control how a Forest Unit operates under the Forest Service's multiuse mandate. According to the 2012 Planning Rule, individual National Forests—or "Forest Units"—are required to incorporate collaboration in the revision process. The Salmon-Challis and Manti-La Sal National Forest Units are both in the process of plan revision, and have used collaborative techniques to varying degrees thus far.

In contexts where multiple users and stakeholders have an interest in management decisions, as in the case of National Forests, collaboration is often necessary for generating stable decisions and management strategies that serve many concerns (Bacow & Wheeler, 1984). The 2012 Planning Rule provides a very broad explanation of collaboration that Forest Units must interpret. Subsequent documents produced by the federal level of the Forest Service give slightly more context. Because the term

"collaboration" is used so broadly in the 2012 Planning Rule, Forest Units have significant leeway in how they conduct collaborative plan revision processes.

While an initial evaluation of the Forest Service's Planning Rule and related documents suggests they provide little in the way of guidance for how to implement collaboration, the fields of dispute resolution, consensus building, and collaborative planning provide significant insight into best practices for multistakeholder collaboration. In this thesis, I examine the extent to which individual Forest Units are integrating best practice approaches for collaboration into their plan revision processes, as well as whether and to what extent federal Forest Service mandates and guiding documents encourage implementation of best practice collaborative decision-making. My intention in doing so is to begin to understand whether best practices for collaboration are being employed in Forest Units, and whether this is a result of federal Forest Service guidance or otherwise. Doing so will provide a foundation for further study of whether Forest Unit plan revision processes lead to expected collaborative outcomes, and whether this correlates with implementation of best practices—or not.

I first draw on previous research and scholarship on dispute resolution, consensus building, and collaborative planning to establish a list of best practices for collaborative decision-making and planning. I use this list to examine the extent to which the Forest Service's 2012 Forest Planning Rule and related guiding documents reflect and encourage use of these best practices in Forest Unit plan revisions. I then analyze the ongoing plan revision processes of two different Forest Units—the Salmon-Challis in Idaho and the Manti La Sal in Utah—to identify the extent to which best practices for collaboration are being integrated into these processes. Reflecting on the findings of my

analyses, I then discuss opportunities and challenges for collaborative forest plan revisions and suggest pathways for future research. I also make some preliminary recommendations to the Forest Service about ways they might enhance collaboration in forest plan revisions.

Collaboration is a dynamic process that takes time. In the case of forest plan revisions, the collaborative process often takes years. Much the same, the effect of collaboration typically manifests over time. This thesis examines only the early stage "inputs" of collaboration, mainly whether best practices for collaboration appear to be influencing the forest plan revision process in the two case studies. Since both Forest Units are in the early stages of their plan revision process, I specifically look at the extent to which identified best practices for collaboration are reflected in the Forest Service's planning documents. This thesis does not make any claims regarding how collaboration was used in practice during plan revision processes, or what the outcomes of collaboration have been. Instead, it provides a preliminary understanding of how "collaboration" is being implemented in the forest plan revision process. It also provides insights for how the Forest Service can perhaps improve collaborative forest plan revision processes. Further, this study provides a foundation for and framework by which to analyze the extent to which implementation of collaborative best practices in forest plan revisions correlates with desired outcomes—such as "fair, efficient, stable, and wise" management strategies (Susskind & Cruikshank, 1987).

Below, I give a brief overview of Forest Service Management Plans and the 2012 Planning Rule that mandates collaborative forest plan revisions, explain how collaborative efforts in the Forest Service have been previously studied, and provide

context of both the Salmon-Challis and Manti- La Sal National Forests. Chapter 2 draws on relevant literature to create a list of collaborative planning and decision-making best practices; it also explains the methodological approach I use to examine the extent to which collaboration best practices are manifest in federal Forest Service plan revision guidance and the two Forest Unit case studies. In Chapter 3, I use the best practices of collaboration list and methodology discussed in Chapter 2 to analyze federal Forest Service revision guidance and my two case studies. In Chapter 4, I compare my findings from the two case studies against each other and my findings from the federal Forest Service documents, concluding that the federal Forest Service documents do not provide substantial outlines for best practice collaboration, while the Forest Units have used aspects of collaboration without prompting. I also make recommendations for the Forest Units on best practices that could be included in the future, and suggest pathways for future research.

1.2 The Forest Service and Management Plans

In 1905, President Theodore Roosevelt created the US Forest Service. Before leaving the office of President, he established 17 million acres of National Forest land (US Forest Service, n.d.-l). Gifford Pinchot served as the first chief of the Forest Service and is well known for instilling the Forest Service with conservation ethics (United States History, n.d.-a). His focus on conservation of natural resources and his practice of conserving the greatest amount of land for the greatest number of people for the longest time contributed to the long history of environmentalism in the United States (Forbes, 2004). The utilitarian nature of this pragmatic process for forest management has

continued to exhibit positive and more controversial outcomes. National Forests have always been used for multiple purposes such as logging and ranching, but following World War One, recreation and tourism became primary uses for the forests as well (United States History, n.d.-b).

Throughout the latter 20th century, there were ongoing debates and lawsuits about the practice of clear-cutting forests (US Department of Justice, 2015). These debates led to Congress voting in favor of the National Forest Management Act (NFMA) in 1976. This act shifted management of forests from timber production to protecting ecosystems, as part of an attempt to move past a utilitarian, single-use style focus (United States History, n.d.-a). It allowed individual Forest Service Units to manage for multiple use and create individual plans for each forest (United States History, n.d.-a). The history of litigation as a disruption of forest management lingers today and has been a source of tension in some regions (National Forest Foundation, 2016a).

The NFMA broadly expanded the Forest Rangeland Renewable Resources Planning Act of 1974, which directed the Forest Service to manage renewable resources (The Center for Regulatory Effectiveness, n.d.). Rather than an act that manages only timber, NFMA requires the Forest Service to take into account multiple use and sustainable yield practices (US Forest Service, 1976). The act also requires that the Secretary of Agriculture, and subsequently Forest Managers, allow for public participation in the revision of land management plans (US Forest Service, 1976). This meant that the public was invited to information sessions and given an opportunity to respond with written comment to proposed plans (US Department of Agriculture Forest Service, 2016). NFMA introduces the requirement that each Unit of the Forest System

will create an integrated management plan that is available to the public (US Forest Service, 1976).

Since the creation of NFMA in 1976, there has been a 40-year history of revisions and amendments regarding the act. While NFMA regulates many Forest Service processes, additional documents called planning rules give more in-depth directives regarding forest management plans (US Forest Service, n.d.-g). There have been two main sets of planning rules since the NFMA came into effect (US Forest Service n.d.-g). Prior to 2012, the last significant Forest Service Planning Rule was created in 1982. Since then, there have been many new ecological, social, and economic findings that have caused a need for a new planning rule. The 1982 rule allowed for very limited public participation, and only required participation during the National Environmental Protection Act (NEPA) process (US Forest Service, 2016a). The most recent rule was created in 2012 and introduces the requirement of collaboration throughout forest management planning processes (US Forest Service, n.d.-b). Additionally, the 2012 rule will result in many more amendments to forest services plans than the 1982 rule allowed for (US Forest Service, 2016a). This change is due to the acknowledgement that large-scale land management policy must be adaptable to changing social and ecological conditions.

In 2012, the Forest Service revised their planning rules significantly (US Forest Service, 2012). Following the proposals of various plans, and the collection of public feedback, the Forest Service opted for a plan that provides guidelines to all Units of the Forest Service in regard to their land management plan revisions (US Forest Service, 2012). Land management plans, as defined in the 2012 Land Management Plan, guide

individual Forest Units towards plans that manage resources, use science-based development, involve collaboration, and can adapt through revision. The process put in place by this planning rule involves three phases that are estimated to take 4 years to complete—assessment; plan development, amendment, and revision; and monitoring (US Forest Service, 2012). Each Forest Unit is required to update its management plan every 15 years; however, Congress has waived the 15-year revision requirement so long as progress is being made on plan revision (US Forest Service, n.d.-n).

The preparation phase of the Forest Revision Plan is a crucial step (US Forest Service, 2016b). Prior to the actual 4-year plan revision process beginning, a Forest Unit must assess its capacity and the resources needed to complete the process. The Forest Unit also needs to develop a public participation strategy and other relevant strategies that will assist during the subsequent stages (US Forest Service, 2016b). During the assessment phase, the Forest Unit conducts a rapid assessment of natural, social, and ecological resources in the managed boundaries (US Forest Service, 2016b). The assessment phase comprises the 1st year of the planning process. Following assessment, the plan development phase begins and runs from years 2 and 3. In this phase, the Forest and partners determine "need for change," which refers to the pieces of the past management plan that need to change based on the assessment in phase one (US Forest Service, 2016a). The plan developed in phase two includes desired outcomes, objectives, standards, guidelines, and goals for the Forest Unit (US Forest Service, 2016b). Additionally, the environmental analysis of the plan occurs in phase two (US Forest Service, 2016b). Phase three, although described as taking the final year of four in the plan revision process, is ongoing throughout the lifecycle of the management plan (US

Forest Service, 2016b). Monitoring will allow for National Forests and the public to amend forest management plans as needed (US Forest Service, 2016b).

The Forest Service is unique in its promotion of collaboration amongst US land management agencies (US Forest Service, n.d.-b). The 2012 Planning Rule was created in-part following a partnership between the Forest Service and the US Institute for Environmental Conflict Resolution. Through this partnership, the organizations collected information from stakeholders regarding strategies for collaboration and public involvement during the management planning processes for individual forests (US Forest Service, n.d.-m). The Forest Service identified six collaborative activities including public meetings, tribal relations, e-collaboration, formal public comment, interagency working groups, and internal task groups (US Forest Service, n.d.-m). The information collected and created during this initial collaboration was used to inform Forest Service policy, as well as recommendations for Forest Units.

The Forest Service is divided into 10 regions (US Forest Service, n.d.-e). Region 4 includes the intermountain west, covering all of Nevada and Utah, and parts of Idaho, Wyoming, and California (US Forest Service, n.d.-i). Of the forests found in Region 4, three have initiated their plan revision process (US Forest Service, n.d.-i). The Salmon-Challis National Forest is in the 1st year of the revision process (US Forest Service, n.d.-c). The Manti-La Sal National Forest began the plan revision processes in 2016 and is completing the assessment phases while also moving on to their plan development and environmental impact statement phase that is set to take 2 years (US Forest Service, n.d.-i). The Ashely National Forest also began its plan revision process in 2016 and is at a similar point in the process to the Manti-La Sal. However, the Ashely plan is not a focus

of this research. In part, this is due to the documents that were available for analysis, and also because the Salmon-Challis and Manti-La Sal use collaboration far differently from one another.

For my research, I examine the collaborative processes employed in the Salmon-Challis and Manti-La Sal Forests, as they have already illustrated how they will use and interpret certain pieces of the federal planning rule in different ways. Additionally, I examined policy and documents produced at the federal level of the Forest Service with the intention of guiding individual Forest Units in their plan revisions. The Forest Service has identified ways in which the public can participate in the 4-year process online, including graphics that show public comment periods (US Forest Service, n.d.-j). While Forest Units are encouraged to reach out to stakeholders and engage them in collaborative processes, this planning piece is largely left up to the interpretation of the forest managers (US Forest Service, 2012).

1.3 The Forest Service and Collaboration

The Forest Service has been a leading land management agency in its incorporation of collaboration practices (US Forest Service, n.d.-b). The agency described collaboration in the 2012 Planning Rule as "as structured manner in which a collection of people with diverse interest share knowledge, ideas, and resources while working together in an inclusive and cooperative manner toward a common purpose" (US Forest Service, 2012, p. 21270). This broad definition of collaboration allows for individual Forest Units to utilize collaboration practices in ways suited to their planning revision processes. The Forest Service does not require that Forest Units incorporate the

factors of best practice collaboration as defined in the next chapter. It has been argued that the incorporation of collaboration by the Forest Service was born out of a reaction to lawsuits and increasing pressure by the public (Cheng, 2006; Nie & Metcalf, 2015). Some scholars have also questioned whether an agency can successfully mandate the use of collaboration in planning (Cheng, 2006). The Forest Service has been incorporating aspects of public participation into the policymaking process since the 1970s (Nie & Metcalf, 2015). While public participation encapsulates a multitude of different types of public engagement, here we are referring to a process in which diverse stakeholders are brought together to create a solution with widespread buy-in. The definition of collaboration will be explained at great length in Chapter 2.

The Forest Service has varied what it considers as collaboration. In the past, it determined that information sharing was a form of public participation (Carr, Selin, & Schuett, 1998). As the Forest Service has begun to change its management plans to be more holistic, collaboration has become much more than public information sessions (Carr, Selin, & Schuett, 1998). When interviewed, some Forest Service employees believed that legislative changes, collaboration training, and established decision-making authority were needed if the agency was going to appropriately use collaborative practices (Dockry, 2015).

In other Forest Service regions, Forest Units have gone through the process of forest plan revision using the policy and directives from the 2012 Planning Rule (Dockry, 2015). Some of the most successful uses of collaborative practices included the use of a third-party facilitator, conducting a situation assessment prior to meeting with the public, and a formal decision-making process (Dockry, 2015). It has also been suggested that

Forest Units have benefited from informal communication amongst stakeholders and clear technical communication amongst all members of the collaborative effort (Halbrooks, 2010). However, some research shows that it was still unclear which factors of collaboration generate active participation by diverse sets of stakeholders (Cheng & Mattor, 2006).

The Forest Service has many different policies, directives, and strategies that influence the ways in which Forest Units' employ strategies of collaborative process. The 2012 Planning Rule is the broadest piece of policy influencing and controlling the way that each Forest conducts its plan revision process. The Planning Directives include additional rules that forest managers must follow (US Forest Service, 2015). Some of these directives are related to use of collaborative methods in plan revisions. Many forests, including the Manti-La Sal and Salmon-Challis, have developed public outreach and collaboration strategies that are additional to those recommended by national policies.

While previous research has to some extent assessed the use of collaboration and/or the anticipated benefits of collaboration in Forest Service planning, this research has not always clearly defined what effective collaboration entails. I will build on existing research by compiling a clear framework of best practice collaboration "inputs" that can be used to examine collaborative forest plan revision processes more broadly, as well as other collaborative land management planning processes. This will allow us to evaluate the extent to which implementation of best practice collaboration inputs correlates with anticipated and desired collaboration "outputs" such as capacity to deal with future problems. I anticipate that the generated list of best practice collaboration

inputs can be used as a source of dialogue in the field of collaboration and begin the process of using a consistent tool for analyzing land management planning collaboration.

1.4 Salmon-Challis National Forest

The Salmon-Challis National Forest, located in central Idaho, covers 4.3 million acres of land (United States History, n.d.-a). Inside the boundaries of the forest, the Frank Church Wilderness Area and new Jim McClure-Jerry Peak Wilderness Area can be found. In addition to Wilderness Areas, the National Forest is also home to the Wild & Scenic Salmon River and The Middle Fork of the Salmon. The differing designations inside of Salmon-Challis boundaries make the forest unique. Each piece of land with distinct designation requires different pieces of management policy and planning. Stakeholders have differing opinions about how land is managed (National Forest Foundation, 2016a).

Elevation varies greatly in the Salmon-Challis, with low elevations around 2,000 feet above sea level ranging to mountain peaks that are 11,000 feet tall (Forest History, n.d.-a). All of the Salmon Forest is within the drainage of the Salmon River. The Idaho batholith formation is known for gold, and mining has been a strong component of the region's rich history (Forest History, n.d.-b).

The Middle Fork of the Salmon River, which runs through the Frank Church Wilderness Area inside of the Salmon-Challis National Forest, has long been considered the heart and life blood of the indigenous peoples of the region. Up until 1879, Shoshone-Bannock Tuka-Deka people lived on and near the river (US Forest Service, n.d.-a). Pictographs can be found on the rocks in the Wilderness. In 1805, Captain Lewis and his

crew reached what is now the Salmon-Challis National Forest. At that time, the crew determined that it was too dangerous to navigate the Salmon River (US Forest Service, n.d.-k). Famously, Sacajawea was born near the Salmon-Challis National Forest (US Forest Service, n.d.-a). Sixty years after Lewis and Clark passed through the forest, gold was discovered (Forest History, n.d.-a). The history of mining, trading, and trapping in the region that is now the Salmon-Challis Forest extends through the 19th century.

In 1906, the Salmon National Forest was established (Forest History, n.d.-a). Two years later, in 1908, the Challis National Forest was named. There are long and detailed records of the administrative histories of both forests (US Forest Service, 2009). In 1998, the two forests were combined in an effort to streamline the Forest Service (US Forest Service, n.d.-a). Nevertheless, this Forest Unit has six district offices in the region.

The Salmon-Challis National Forest is in year 1 of the planning revision process. Prior to beginning this year, the Forest contracted a stakeholder assessment from the National Forest Foundation (2016a), which summarized some key interests and potential points of conflict in the region. Additionally, the National Forest Foundation provided suggestions and tips for how to best incorporate collaboration into the plan revision process (2016b). This aided the Salmon-Challis Forest Unit in putting together their public participation strategy document, which will be used in guiding the forest throughout the process and life of the management plan.

The Idaho Conservation League and Salmon Valley Stewardship have been working on public outreach and organizing regarding the Salmon-Challis revision process (Idaho Conservation League, n.d.; Salmon Valley Stewardship, n.d.). The Idaho Conservation League has hosted a webinar that provided information about the process

and how the public can become involved. Links on their website bring the public to Forest Service webpages that have informational videos and documents. Additionally, Salmon Valley Stewardship has cohosted information sessions and discussions regarding the plan revisions with the Forest Service (Salmon Valley Stewardship, n.d.).

In addition to the work of Idaho Conservation League and Salmon Valley Stewardship, the Salmon-Challis National Forest hosts a webpage dedicated to relevant documents and upcoming ways for the public to participate (US Forest Service, n.d.-o). In March 2017, the Salmon Valley Stewardship hosted three meetings in hopes to form a collaborative group that will coordinate the ongoing planning efforts of both the Salmon-Challis National Forest and the Bureau of Land Management (US Forest Service, n.d.-o). While the assessment conducted by the National Forest Foundation found that there were some serious points of conflict and possibilities for collaboration in the region, stakeholders overall seemed very willing to collaborate and excited that the Forest Service was shifting towards more public participation. In Chapter 3, the documents produced by Salmon-Challis and the public will be explored in much greater detail.

1.5 Manti-La Sal National Forest

The Manti-La Sal National Forest spans 1.4 million acres in central and southeastern Utah (Peterson, n.d.). Like the Salmon-Challis National Forest, the Manti-La Sal National Forest has a long social ecological history. There are almost 10,000 years of indigenous history including people from the Fremont and Anasazi tribes (US Forest Service, n.d.-d). Later, Mormons and other White settlers established homesteads in the area. There is also a history of extractive industries including gold, silver, radium, and

uranium (US Forest Service, n.d.-f). The Manti-La Sal forest is located in the southeast corner of Utah near Moab as well as east of Price, Utah.

The landscape of the Manti-La Sal National Forest is diverse. Spanning the Abajo Mountains, Colorado River Plateau, and Wasatch Plateau, there are examples of a wide range of geological formations in the forest (Utah.com, 2017). The Dark Canyon Wilderness Area also falls within the boundaries of the National Forest (National Forest Foundation, 2017). Most recently, a portion of Manti-La Sal Forest was included in the declaration of Bears Ears National Monument under the Antiquities Act. The Manti became a reserve in 1903 and later became the Manti-La Sal National forest in 1950 (Forest History, n.d.-a). The last time Manti-La Sal revised their management plan was in 1986 (US Forest Service, n.d.-d).

The Grand Canyon Trust, a nonprofit focused on conservation, has been closely following the plan revision process for the Manti-La Sal Forest (Peterson, n.d.). Along with conducting science for the past 13 years in and around Manti-La Sal National Forest, the Grand Canyon Trust is urging its members and the public to become involved in the 4-year plan revision process as much as possible. Additionally, The Great Old Broads for Wilderness organization has created a repository for information regarding the Manti-La Sal plan revision where the public can search for and submit relevant documents (Great Old Broads for Wilderness, n.d.). While much of the comparison between the Salmon-Challis and Manti-La Sal revision process will occur in Chapters 3 and 4, it is worth noting the different tones that nongovernmental organizations around each Forest Unit have adopted in regard to the plan revision process.

Organizations like Salmon Valley Stewardship have assumed a partnership with

the Forest Unit. However, there is a more conflictual stance taken by organizations like Grand Canyon Trust in regard to the Manti-La Sal plan revision process. Later, we will observe the differences in documents produced by both Forest Units that may have led to these differing relationships.

1.6 Research

In the chapters that follow, I examine how the Forest Service's 2012 Planning Rule guiding documents address collaboration and how the two case study Forest Units are integrating collaboration into their forest plan revision processes and plans. More specifically, I analyze the extent to which these Forest Units and the federal Forest Service are embodying best practices for collaboration in their plans and documents. In order to do this, it is necessary to first clearly lay out what best practices for collaboration are, which I do in the following chapter. In the next chapter, I also explain how I analyze the Forest Service documents and plans using this list of collaboration best practices.

CHAPTER 2

RELEVANT LITERATURE AND METHODS FOR ANALYSIS

Collaboration is a title given to a variety of practices, and thus its use in this research needs to be clearly defined. Currently, there is a wealth of research examining the Forest Service's use of collaboration in various forums. Because of this, I provided a review of previously conducted research in the field, and explained how this thesis continues to build on and critically assess past examinations of collaborative management in the Forest Service. Here, I provide a review of literature that defines best practice collaboration for the purpose of this research. Additionally, each factor that contributes to best practice collaboration will be defined using the existing body of literature. I use these clearly defined factors to analyze Forest Service policy. Finally, in this chapter, I outline the method of content analysis and matrix analysis that serve as tools for examination of the Forest Service Policies in the later chapters.

2.1 Best Practice Collaboration

Collaboration is a term with many meanings. In this thesis, I am specifically interested in collaborative processes that build widespread buy-in for management plans among stakeholders who later could impact the effectiveness of management strategies—what is often referred to as collaborative decision-making, planning, and/or management.

Broadly, collaboration is the process of bringing together a diverse group of stakeholders with a variety of interests. Those stakeholders explore differences to create solutions that could not occur outside of the group. As the world becomes more complex, social-ecological problems demand a new set of tools (Innes & Booher, 2010). Best practice collaboration provides a decision-making framework that deals with complexity by emphasizing the interconnectedness of stakeholders. In natural resource management, collaboration can be used as a way to deal with uncertainty (Susskind, Comacho, & Schenk, 2011). As mentioned in Chapter 1, the Forest Service has previously promoted and utilized public participation in their planning and management processes. Public participation is different from collaboration. Later in this chapter, I provide a comprehensive definition regarding the spectrum of public engagement, which includes aspects of public participation. In doing this, I distinguish between the two terms and clarify how both are employed in this research. In Chapter 3, I examine how the Forest Service has conflated public participation and collaboration, often in ways that detract from the success of a collaborative effort.

While the fields of dispute resolution, consensus building, and collaborative planning have vibrant literatures regarding best practices for collaboration, my review of this scholarship did not lead to a clear and agreed-upon list of best practices for collaborative planning and decision-making processes. Additionally, the literature on best practice collaboration often conflates the "inputs" of collaboration, such as completion of a situation assessment, with the outcomes or "outputs" of an effective collaborative process, such as the building of stronger relationships between stakeholders (Czaika, Rumore, & Schenk, 2017). In this chapter, I synthesize collaboration literature into a list

of commonly identified best practices that can be used to analyze Forest Service documents.

1. Engage Early: Early engagement of stakeholders is a crucial first step of collaboration (Susskind, McKearnan, & Thomas-Larmer, 1999). This means that the convener should bring stakeholders together prior to a decision being made, or before specific solutions have been explored (Gray, 1989). By engaging stakeholders early, before initiating the collaboration, the process becomes more about co-creation of solutions. Not engaging stakeholders early can cause problems with the efficiency of the process and the long-term sustainability of a plan down the line.

2. Conduct a Situation Assessment: A situation assessment is a process that summarizes who the relevant stakeholders are, what their interests are, which interests are shared, where the disagreements lie, and the process and time needed to collaboratively address a problem (Susskind, McKearnan, & Thomas-Larmer, 1999). There are many terms in the literature that refer to the concept of a situation assessment, but for the purpose of this thesis, I will consistently use the term "situation assessment" (McKearnan, 1997). While there are many terms for the process, scholars generally agree that a situation assessment explores who has a stake in a conflict or decision-making situation, what their issues and concerns are, what areas of agreement and disagreement exist, what information they need, if it makes sense to proceed with a collaborative process, and what circumstances need to exist for stakeholders to participate (Susskind & Thomas-Larmer, 1999). Most scholars also agree that this process should be carried out by a neutral third

party (Susskind & Thomas-Larmer, 1999). Experts suggest that not conducting a situation assessment could mean leaving out valuable stakeholders, missing key conflicts and shared interest, or entering into a poorly designed process at the wrong time (Susskind & Thomas-Larmer, 1999).

The first phase of a situation assessment involves reaching out to all known relevant stakeholders and conducting interviews. Following initial interviews, there will most likely be an additional round of interviews with stakeholders who were recommended by individuals in the first round of discussions. After interviews, the assessor or person conducting the situation assessment summarizes what was said in interviews, and draws upon patterns of conflict or interest that will become important in the collaboration (Consensus Building Instituted, 2001). When the summarizing has been completed, experts suggest that the party responsible for the situation assessment may recommend a possible process design that effectively deals with the issues and interests that arose out of interviews (Consensus Building Institute, 2001). Finally, the assessment is shared with stakeholders to gather their input on topics that were missed or covered incorrectly (Susskind & Thomas-Larmer, 1999).

a. Identify a Clear Opportunity for Collaboration

One key purpose of a situation assessment is to identify whether there is a clear need and/or opportunity for collaboration. Collaboration takes a lot of time and resources, and a collaborative planning or decision-making approach is not always appropriate (Innes & Booher, 2010). Sometimes, an issue or project merits collaboration, but there are

additional factors that would make the collaboration unsuccessful (Carpenter, 1999). A situation assessment allows parties to consider if there is a clear opportunity for collaboration before proceeding, as well as informs what kind of collaborative process is most appropriate and likely to succeed.

b. Understand History of Conflict or Collaboration

A situation assessment also provides the opportunity to identify crucial historical context amongst stakeholders, as well as to identify previous collaborative efforts that exist in the region and may be useful in the emerging process. Experts suggest that an existing history of collaboration amongst stakeholders certainly makes it easier to initiate new efforts (National Forest Foundation, n.d.). Similarly, a history of conflict could pose major challenges. Scholars agree that collaborative dialogue can be more effective if prior relationships are in place, or if stakeholders are familiar with the collaborative process (Susskind, McKearnan, & Thomas-Larmer, 1999). It is important to recognize if failed collaboration has occurred amongst a group of stakeholders in the past and address why that effort failed (Carpenter, 1999).

c. Identify Stakeholders

Scholars widely agree that identifying all relevant stakeholders in the situation assessment is absolutely crucial for the overall success of a collaboration (Gray, 1989; Susskind & Cruikshank, 1987; Susskind, McKearnan, & Thoams-Larmer, 1999). For there to be a potential for

collaboration, stakeholders must be interdependent upon one another in addressing the posed issue (Innes & Booher, 2010). Below, a further explanation is provided on the importance of stakeholder inclusion and diversity.

3. Define an Effective Process, Based on What Was Learned in the Situation Assessment:

a. Appropriate Party Convenes Collaboration

A convener is someone who brings together all of the relevant stakeholders to begin a collaboration and an effective process. This person or organization needs authority either through a political position or reputation in the community (Gray, 1989). The convener can be a stakeholder but is often the organization that notices a need for collaboration (Selin & Chevez, 1995). Much of the literature suggests that the convener is the person or organization that determines if consensus and collaboration are feasible, chooses stakeholders, locates resources, and works with a facilitator (Carlson, 1999; Susskind, McKearnan, & Thomas-Larmer, 1999). However, some literature suggests that responsibility is the job of a neutral facilitator (Gray, 1989). There have been challenges with federal agencies convening efforts in the past because of perceived power imbalance or unwillingness from the agency to participate in a long-term process, but as the literature recognizes, these issues have been addressed with the incorporation of a third-party facilitator or the use of a non-government organization as a co-convener (Carlson, 1999).

b. Engage All Relevant Stakeholders

An overwhelming amount of literature places emphasis on the importance of involving a diverse set of relevant stakeholders in an effective collaborative process (Bingham, 1986; Cestero, 1999; Gray, 1989; Schueet, Selin, & Carr, 2001; Selin & Chevez, 1995; Susskind, McKearnan, & Thomas-Larmer, 1999). There are quite a few advantages of including a broad range of stakeholders. First, scholars agree that the inclusion of a diverse set of stakeholders with varying interests broadens the view of the problem at stake (Gray, 1989; Vickers, 1965). Diversity of interests can build respect and appreciation amongst the members of the collaboration (Friend & Jessop, 1969). As mentioned above, experts widely agree that identifying the right group of stakeholders is one of the most important first tasks of any successful collaborative (Gray, 1989; Susskind & Cruikshank, 1987; Susskind, McKearnan, & Thoams-Larmer; 1999).

It can be a difficult task to identify all stakeholders impacted by the issue at hand (Bacow, 1984), but experts note that doing so plays a huge role in the overall success of the effort (Bingham, 1986). Individual stakeholders and groups come to the table for a variety of reasons (Innes & Booher, 2010). Because of this, it can be challenging to convince certain stakeholders to join the dialogue. Additionally, if stakeholders are left out of the collaboration, it can pose a threat to the overall success of the effort (Fox, 1982). Stakeholders who are not included but are affected

by the outcome of the collaboration can later threaten the success of a collaborative effort. Some experts note that certain stakeholder groups that are difficult to represent, such as "future generations," pose an additional challenge and often require assigning a stakeholder to represent the group as a proxy (Sussking, McKernan, & Thomas-Larmer, 1999).

i. Legitimacy of Stakeholders

In the process of engaging all stakeholders, experts suggest that there may be an additional challenge of gathering consensus amongst all individuals involved as to who counts as having a "legitimate" stake in this issue (Gray, 1989; McCann, 1983). If there is preexisting conflict between stakeholders, studies note it can be difficult to convince individuals to come (Bacow, 1984). As stated above, these types of pre-existing conflicts should be identified in a situation assessment (Susskind & Thomas-Larmer, 1999).

ii. Stakeholders Are Interdependent

When selecting and engaging stakeholders, identifying their interdependence regarding the collaborative effort is key. By bringing awareness of overlapping interests and the ability to create value as a group, scholars suggest that collaboration can strengthen relationships between stakeholders (Gray, 1989). In dealing with the complex social-ecological systems, some experts assert that collaboration serves as a fantastic method for problem-solving because it illuminates the connectedness of stakeholders (Innes & Booher, 2010). Through

collaboration, stakeholders and the solutions they arrive at become interdependent (Bacow, 1984). One way to illustrate how interdependent stakeholders are is to show that their Best Alternative to Negotiated Agreement (BATNA) is such that they will get more value and a better deal through negotiated agreement in a collaboration than by dealing with an issue on their own (Susskind & Cruikshank, 1987).

iii. Build on Local Leadership

If a community or group of stakeholders already has leadership, experts agree that it can be extremely useful to draw upon those individuals (Cestero, 1999; Cheng, 2006). Similarly, utilizing already established relationships as a source of leadership can be powerful (Wondolleck & Yaffee, 2000). In *Planning with Complexity: An Introduction to Collaborative Rationality*, Innes and Booher (2010) explain that collaborations must include local knowledge to deal with complex problems. Historically neglected sources of leadership and information such as indigenous groups must be included in these efforts to fully grasp collaborative potential.

d. Effective Organizational Principles

i. Clear Process and Guidelines

For an effective process to occur, scholars agree that collaboration needs well-defined processes and guidelines, which include the purpose of the effort and roles for stakeholders (Bingham, 1986; Innes & Booher, 2010; Selin & Chevez, 1995). Experts agree that stakeholders need a clear

roadmap of the process and are more likely to join if the stages are outlined (Straus, 1999; Susskind, McKearnan, & Thomas- Larmer, 1999). It is recommended that stakeholders be brought into the process of creating the roadmap and guidelines for the collaboration (Carpenter, 1999). While this stage of the process can be time consuming, experts say that it is important that the group does not move on to dialogue before a clear process is established (Susskind & Cruikshank, 1987). In addition to setting guidelines, some scholars suggest that general commitment to the collaborative process is an important piece of the problem-setting phase (Saunders, 1985; Schermerhorn, 1975).

As part of an effective organization for a collaboration, methods for addressing conflict should be established. Scholars agree that collaboration can be used to solve environmental disputes (Bingham, 1986; Gray, 1989). Bingham (1986) cites land use, natural resource management and public land use, water resources, energy, air quality, and toxics as places where collaborative solutions can be successfully explored. As experts describe, a facilitator can use a collaborative effort as a place to create a dispute resolution design, building infrastructure to deal with conflict in the future (Poirier Elliott, 1999). In *Making Collaboration Work: Lessons from Innovation in Natural Resource Management*, Wondolleck and Yaffee (2000) cite conflict as a common factor that brings stakeholders to a collaboration, allowing space for stakeholders to work towards resolving issues.

ii. Address Issues Related to Hierarchy

Best practice collaboration scholars suggest that there is no hierarchy between stakeholders in an effectively organized collaboration (Gray, 1989; Innes & Booher, 2010). However, for agencies like the Forest Service, removing all hierarchy and decision-making power is not a possibility. In instances such as these, cases have shown that agencies can be forthcoming about the hierarchy, and clear in their intentions and outcomes of the collaboration (Bingham, 1986). One way to alleviate hierarchy when you cannot remove it is to address everyone's Best Alternative to Negotiated Agreement (BATNA) (Fisher, Ury, & Patton 1981). A BATNA is a stakeholder's alternative if they do not reach agreement in the collaboration.

iii. Clearly Define Desired Outcomes and Goals

Many scholars highly recommend that stakeholders clearly define desired outcomes and goals of the collaboration early (Cestero, 1999; Schueet, Selin, & Carr, 2001; Selin & Chevez, 1995). However, others suggest that this limits the types of solutions and outcomes that will be generated (Innes & Booher, 2004). Regardless, in all collaboration, scholars agree that the goal is to reach agreements that all stakeholder involved can live with (Susskind, McKearnan, & Thomas-Larmer, 1 999).

iv. Appropriate Timing

Collaboration takes a lot of time, and effective organization of a collaborative process recognizes this need. Scholars suggest that being

open with how much time is needed, especially at the beginning of the process, can help ease tension (Susskind, McKearnan, & Thomas-Larmer, 1999). Additionally, setting a clear timeline for the process has been argued to keep groups on track (Bingham, 1986). Some argue that a strict timeline does not allow for the emergent process to take place as effectively—thus limiting collaboration (Gray, 1989).

v. Establish Ground Rules

Establishing ground rules amongst all stakeholders early in the collaboration is a key characteristic for success (Society of Professionals in Dispute Resolution, 1997). Experts point to ground rules as dictating the way in which stakeholders will interact with each other (Fisher, Ury, & Patton, 1981; Gray, 1989). The process of setting ground rules early in the collaboration can help build respect amongst stakeholders (National Forest Foundation, n.d.). A willingness to change ground rules as needed allows for necessary flexibility (Susskind, McKearnan, & Thomas-Larmer, 1999).

vi. Develop an Effective Process for Information Sharing, Mutual Learning, and Fact-Based Disputes

Scholars widely agree that successful and efficient collaboration allows for stakeholders to share information and learn together (Booher, 2004; Cestero, 1999; Doherty, 2015; Kenney, McAllister, Caile, & Peckham, 2000; Schueet, Selin, & Carr, 2001). In dealing with complex technical information, scholars note that it has been habit to turn to experts

(Laws, 1999). By exchanging information amongst stakeholders, rather than turning to technical experts, understanding and uncertainty can be resolved (Wondolleck & Yaffee, 2000). The best sources of information may be from nongovernment organizations, and recognizing this is crucial for successful collaboration (Wondolleck & Yaffee, 2000). Approaches for addressing information sharing, mutual learning, and fact-based disputes include joint fact finding (Bingham; 1986; Carpenter, 1999; Ehrmann & Stinson, 1999; Shenk, Vogel, Mass, & Tavasszy, 2016) and collaborative learning forums (Leach & Dutson, 2016).

4. Administer an Effective Process:

a. Effective Facilitation

Experts recommend that a collaborative group hire a third-party facilitator who can manage the process and conversations (Bingham, 1986; Susskind & Cruikshank, 1987; Susskind, McKearnan, & Thomas-Larmer, 1999). There is some disagreement in the field as to whether the facilitator should come from inside or outside of the group of stakeholders, but most agree it is a beneficial tool for effective collaboration (Society of Professionals in Dispute Resolution, 1997; Susskind, McKearnan, & Thomas-Larmer, 1999). If a collaborative project does select a third-party facilitator, experts agree that the facilitator must be someone who all stakeholders find acceptable (Susskind, McKearnan, & Thomas-Larmer, 1999).

Facilitators can be responsible for managing the process of a

collaboration and ensuring that productive dialogue is carried out in a respectful manner (Thayer-Hart, 2007). Facilitators should have the skills to create efficient meetings and aid the group in consensus building. The facilitator is typically responsible for assembling an agenda, addressing stakeholders who deviate from rules or processes established by the group, and confirming that all stakeholders understand necessary technical information (Ruete, 2000). As a facilitator, maintaining objectivity is crucial and almost certainly requires that the individual come from a neutral third party (Stanfield, 1999).

b. Facilitate/Support Interest-Based Negotiation and Problem-Solving

An efficient collaborative process is one in which stakeholders negotiate and engage in problem-solving across interests. It is common for stakeholders in multiparty negotiation to focus on particular positions (Fisher, Ury, & Patton, 1981). This approach locks stakeholders in to only their position, putting a strain on relationships and only allowing for traditional bargaining. Thus, value cannot be created. Interests, alternatively, are the "why" behind a position (Fisher, Ury, & Patton, 1981). Scholars suggest that when stakeholders identify their interests as a group, collaboration naturally follows (Wondolleck & Yaffe, 2000). Similarly, experts note that interests are what allow for collaborative efforts to create value (Gray, 1989).

i. Emphasize Value Creation

It is often said that collaboration "makes the pie bigger" (Lax & Sebenius, 1986; Raffia, 1962; Susskind, McKearnan, & Thomas-Larmer, 1999). This metaphor refers to the concept that by gathering stakeholders and working across differences, the creation of value allows for win-win outcomes (Innes & Booher, 2004; Selin & Chevez, 1995). In *Collaborating: Finding Common Ground for Multiparty Problems*, Gray (1989) writes that through collaboration, differences amongst stakeholders become a source of potential value to be shared across members. While this may sound like an overly optimistic and simplistic vision, there are specific characteristics of collaboration that allow for the creation of value. Scholars recommend that by separating the invention of possible ideas and outcomes from the act of committing to options, collaboration can offer a unique space for dialogue and brainstorming (Susskind, McKearnan, & Thoams-Larmer, 1999). Similarly, experts note that by following the invention of new possibilities, collaboration gives space for the packaging of outcomes (Susskind & Cruikshank, 1987). The packaging of value allows for stakeholders to discuss a myriad of different outcomes, and recognize that there is no fixed solution to the problem at hand (Fisher, Ury, & Patton, 1981).

ii. Identify and Use Objective Criteria

Objective criteria refers to standards that can be applied to negotiations such as the market value of a product. These criteria can be

used as a means of finding a "fair" agreement amongst stakeholders (Fisher, Ury, & Patton, 1981). Objective criteria should be identified amongst all stakeholders.

c. Invest in Building and Maintaining Relationships and Trust

Strong relationships are both necessary for the success and efficiency of collaboration, and an outcome of good collaborative efforts (National Forest Foundation, n.d.; Rolle, 2002) Experts note that collaboration allows for interactions between stakeholders that would not have occurred otherwise (Wondolleck & Yaffee, 2000). These new relationships form communication networks (Innes & Booher, 2004), and experts agree that those networks build capacity for future collaboration (Carr, Selin, & Schuett, 1998; Waddock, 1989). The formation of strong relationships goes past the collaborative process, and experts concur that a strong collaboration creates the space for those relationships to form (Davenport, Leahy, Anderson, & Jakes, 2007; Schueet, Selin, & Carr, 2001). This can occur through the processes of joint fact finding, value creation dialogue, or events such as field trips. However, Susskind, McKearnan, and Thomas-Larmer (1999) note in *The Consensus Building Handbook: A Comprehensive Guide to Reaching Agreement* that individual stakeholder interests should not be compromised to save relationships.

d. Work Toward Implementable Solutions

To reach implementable solutions, the stakeholders in a collaborative must explore all interests, invent multiple packages of deals that meet most stakeholder interests, and agree to the ways in which the agreement reached will be carried out (Consensus Building Institute, 2007). Collaborative processes are often ongoing; this means that they do not always conclude upon reaching a final decision. Rather, stakeholders commit to an ongoing process that can sustain the outcomes of the group's decisions (Selin & Chevez, 1995). The collaborative process is emergent and often nonlinear with new information and stakeholder interests shifting and changing outcomes. Because of this, it is important that a collaborative process can adapt (Gray, 1989).

e. Mandate and Continually Double-check That Two-way Information Exchange Is Happening

Stakeholders, who are involved in ongoing collaborative efforts, should be communicating both to the people they represent and to their "back tables." Back table refers to the stakeholder's organization or decision-making body that would be responsible for checking-off on any agreement made during the collaborative efforts. Having a process in place for this kind of communication helps to ensure that agreements reached in collaboration can be carried out by the individuals involved (Susskind & Cruikshank, 1987).

5. **Meaningfully Engage the Public:** In addition to collaboration, there are different types of public engagement that should occur alongside a best practice process. Public participation differs from collaboration both in the ways in which the public is engaged, and the types of processes that are used. Scholars define open participation as a process in which all stakeholders are invited, while representative participation means that it is not practical to invite all stakeholders so representatives are selected (Carpenter, 1999). Defining different levels and types of participation from the beginning of the collaboration is important (Gray, 1989). Experts suggest that allowing stakeholders to participate at a variety of levels also provides an opportunity for stakeholders with limited time to share their interests and help create value (National Forest Foundation, n.d.).

   The International Association for Public Participation provides a spectrum of possible ways in which organizations can engage the public (International Association for Public Participation, 2014). *Informing* the public means that an organization has a responsibility to share information with interested parties. *Consulting* involves obtaining public feedback. *Involving* the public goes a step further and means that the organization will work directly with stakeholders to address their concerns, but does not commit the organization to changing their practices or outcomes based on this involvement. *Collaboration* is an actual partnership between the organization and the public in which a reciprocal relationship is formed and parties are looking to each other and sharing information with one another. Collaboration is the primary focus of this research. The final piece of the spectrum is full empowerment, which allows the public to

make the decision for the organization. All of these pieces of the spectrum can be employed at various times to meet various needs of the public and the organization (International Association for Public Participation, 2014).

6. **Ensure There Are Sufficient Resources Set Aside to Succeed:** Collaboration requires many resources (Kenney, McAllister, Caile, & Peckham, 2000). Experts agree that ample financial support and personnel are required for the success of a collaborative effort (Kenny, McAllister, Cailer, & Peckham, 2000; National Forest Foundation, n.d.). A certain benefit of collaboration is that these costs can be shared amongst stakeholders (Wondolleck & Yaffee, 2000). Early on in the process, scholars suggest resources should be identified (Susskind, McKearnan, & Thomas-Larmer, 1999). Selin, Schueet, and Carr (1997) point out that Forest Service employees have expressed feeling a lack of support from the agency in conducting collaborative work in the past. It is typical for the cost of collaboration to fall to all stakeholders (Gray, 1989). Dedicated personnel need to be identified early, as the behind the scenes work of collaboration takes a lot of capacity (Innes & Booher, 2010). In Table 1, you will find all six factors with their sub-characteristics listed.

2.2 Best Practice Collaboration and the Forest Service

While it is not practical for the Forest Service to include all of the defined characteristics of best practice collaboration as outlined in the above section, here I describe what the plan revision process might look like if a Forest Unit were to include the most pertinent characteristics of collaboration. It has been suggested that the Forest

Table 1

The Six Factors of Best Practice Collaboration	
1. Engage Early	a. engage prior to stakeholders becoming invested in solutions b. collaboration is seen as "co-creation" process
2. Conduct a Situation Assessment	a. Identify a clear need for/opportunity for collaboration b. Understand history of conflict and/or collaboration c. Identify stakeholders d. Conducted by a credible neutral/outside party e. Appropriate time for collaborative process
3. Design an Effective Process Based on the Situation Assessment	a. Appropriate convener convenes collaborative effort i. Co-convening may be appropriate ii. Credibility/legitimacy b. Engage all relevant stakeholders i. Legitimacy of stakeholders ii. Stakeholders are interdependent iii. Build on local leadership c. Effective organizational principles i. Clear process and guidelines ii. Nonhierarchical iii. Clearly defined outcomes and goals iv. Timing (is there enough time, is now the right time?) d. Develop effective processes for information sharing, mutual learning, and resolving "fact-based" disputes i. Joint fact finding ii. Collaborative learning forums

Table 1 Continued

4. Administer an Effective Process	a. Effective facilitation i. Neutral in most situations ii. Best practices for facilitation defined b. Facilitate/support interest-based negotiation/problem-solving i. Emphasis on value creation ii. Identify and use objective criteria c. Invest in building and maintaining relationships/trust i. Processes like field trips d. Work toward an implementable solution i. Explore all possible limitations to effective implementation ii. Possible ongoing collaboration post-decision iii. Adaptive management e. Mandate and continually double-check that two-way information exchange is happening
5. Meaningfully Engage the Public	a. IAP2 spectrum b. Public engagement process parallel to collaboration
6. Ensure there are Sufficient Resources	a. Resources including money, personnel, and time b. Sharing costs and resources c. Identify costs and resources

Service does not have a strong history of collaboration (Nie & Metcalf, 2015). Some scholars even suggest that the reliance on scientific experts to communicate with the public, and use of minimal public participation in the past, has actually built mistrust of the organization (Carr, Selin, & Schueet, 1998; Innes & Booher, 2004).

1. **Engage Early:** A Forest Unit has 4 years to complete the three-phase plan revision process. Prior to beginning the plan revision process, a Forest Unit should engage stakeholders and begin to use best practice collaboration. Engaging the public early means that a Forest Unit can avoid conflict and inefficiency in the planning process later. While the Forest Unit knows that the end goal of a collaboration must be a revised forest management plan, the Forest Unit personnel should go into the process without preconceived notions of outcomes.
2. **Conduct a Situation Assessment:** Before beginning the 1st year of a plan revision process, and prior to drafting a public participation strategy document, a Forest Unit should conduct a situation assessment. Contracting the situation assessment to a third-party contractor could be a useful way to gain unbiased insight into the community and shared interests. The situation assessment should be used to determine where collaboration could be successful, identify the communities' history of conflict or collaboration, and design an effective process. The situation assessment is an early and clear way for a Forest Unit to begin practicing effective collaboration strategies before beginning the plan revision process. In the case of the planning revision process, the Forest Service

or individual Forest Units need to identify a need for collaboration (Waddock, 1989).

3. **Design an Effective Process Based on the Situation Assessment:** If a Forest Unit conducts a situation assessment, they will be able to create an efficient collaboration processes that can be used throughout the plan revision. A Forest Unit should clearly distinguish the collaborative effort from the rest of the planning revision work. Through the designing of an efficient process, the Forest Unit should decide whether it makes sense for Forest Service personnel to convene a collaboration. In some cases, and within the limits of the Federal Advisory Committee Act, a co-convener or nongovernment convener can be a useful way to capitalize on existing leadership in the community. Clearly defining roles, responsibilities, and process is crucial. While designing an effective process for collaboration, a Forest Unit should also create effective ways in which to share information, and joint fact find amongst stakeholders.
4. **Administer an Effective Process:** If it is possible for a Forest Unit to do so, hiring a neutral third-party facilitator can be extremely useful for the plan revision process. This person or organization can be responsible for ensuring that the process is managed, and can help to lead dialogue towards interest-based problem-solving that will lead to stakeholders creating value. If a Forest Unit cannot hire a neutral facilitator, Forest Service personnel can still aid in the facilitation of relationship building and the exchange of information to constituencies. A commitment to learning together and from one another is of great importance for successful collaboration (Cheng, 2006). In the past, the

Forest Service has acted as the information authority (Carr, Selin, & Schuett, 1998). Joint fact finding, or other collaborative learning methods, would be useful tools in the plan revision process.

5. **Meaningfully Engage the Public:** Not all stakeholders will be able to take part in a time-intensive collaboration. Instead, Forest Units should offer a wide range of opportunities for involvement, from brief participation to engaged collaboration. This process of engagement should run parallel to a Forest Service planning collaboration, and the two should share information with each other. However, the Forest Service should clearly distinguish the differences between public participation and collaborative processes.
6. **Ensure There Are Sufficient Resources:** The Forest Unit should assess its available resources during the situation assessment, but also expect to find that other stakeholders can bring resources to the table. Money, time, and personnel should all be considered valuable resources that can be shared amongst the group. Table 2 lists the best practices of collaboration, and ways in which the Forest Service can incorporate those best practices into the plan revision process.

2.3 Content Analysis

In examining which factors of best practice collaboration have been legislated by the Forest Service at a national level, and how these directives have been carried out in differing ways by both the Salmon-Challis Forest and Manti-La Sal Forest, I conduct a content analysis of multiple documents produced by the Forest Service. Deductive coding and discourse analysis serve as the way to find common trends in both processes in this

Table 2

The Six Factors of Best Practice Collaboration and the Forest Service		
Collaboration Factor	**Subfactors**	**Forest Service**
1. Engage Early	**a.** engage prior to stakeholders becoming invested in solutions **b.** collaboration is seen as "co-creation" process	The Forest Service should engage stakeholders as soon as possible before entering into the first year of a plan revision process.
2. Conduct a Situation Assessment	a. Identify a clear need for/opportunity for collaboration b. Understand history of conflict and/or collaboration c. Identify stakeholders d. Conducted by a neutral/outside party, credible e. Appropriate time for collaborative process	A situation assessment is the best tool for a Forest Unit to ensure that they use best practice collaboration throughout the plan revision process. By identifying opportunities for collaboration, the regional history, and stakeholders a Forest Unit reduces the risk of conflict or inefficiencies later.

Table 2 Continued

Collaboration Factor	Subfactors	Forest Service
3. Design Effective Process Based on the Situation Assessment	a. Appropriate convener convenes collaborative effort i. Co-convening may be appropriate ii. Credibility/legitimacy b. Engage all relevant stakeholders i. Legitimacy of stakeholders ii. Stakeholders are interdependent iii. Build on local leadership c. Effective organizational principles i. Clear process and guidelines ii. Nonhierarchical iii. Clearly defined outcomes and goals iv. Timing (is there enough time, is now the right time?) d. Develop effective processes for information sharing, mutual learning, and resolving "fact-based" disputes i. Joint fact finding ii. Collaborative learning forums	After conducting a situation assessment, it becomes much easier for a Forest Unit to design an effective collaborative process. Following the practices of effective process design will not only aid in successful collaboration but also help a Forest Unit to construct a public participation strategy document.
4. Administer an Effective Process	a. Effective facilitation i. Neutral in most situations ii. Best practices for facilitation defined b. Facilitate/support interest-based negotiation/problem-solving i. Emphasis on value creation ii. Identify and use objective criteria c. Invest in building and maintaining relationships/trust i. Processes like field trips d. Work toward an implementable solution i. Explore all possible limitations to effective implementation ii. Possible ongoing collaboration post-decision iii. Adaptive management e. Mandate and continually double-check that two-way information exchange is happening	By hiring a neutral facilitator, a Forest Unit can rely on that person or organization to create interest-based dialogue and manage a collaborative process in a clear way. If a Forest Unit cannot hire a neutral facilitator, Forest personnel should still work to build relationships amongst stakeholders and facilitate two-way information exchange between the Forest Service and public.

Table 2 Continued

Collaboration Factor	Subfactors	Forest Service
5. Meaningfully Engage the Public	**a.** IAP2 spectrum **b.** Public engagement process parallel to collaboration	Not all stakeholders will be able to participate in a full collaboration. It is important for Forest Unit to have ways in which the public can engage outside of a collaborative effort that run parallel to the collaboration.
6. Ensure there are Sufficient Resources	a. Resources including money, personnel, and time b. Sharing costs and resources c. Identify costs and resources	A Forest Unit should identify resources within the agency before entering the collaboration, and also identify areas in which the agency can share resources and expenses with stakeholders.

research (Bernard, Wutich, & Ryan, 2017; Schreier, 2013).

Deductive coding is the process of searching for words and language in text that speak to an existing theory (Bernard, 2017). In this research, the existing theory is best practice collaboration. As identified in an above section, best practice collaboration includes a variety of practices and desired processes. Based on these factors, I have created a set of codes and I have applied them to the documents that have been produced by the Forest Service. Following the close examination and coding of these documents, I created a matrix that can be analyzed as a way to better understand collaboration and the individual Forest Units (Bernard, Wutich, & Ryan, 2017).

Content analysis serves as a way to systematically read documents in search of trends and themes that can be analyzed (Stemier, 2001). By compressing large amounts of words into categories, a researcher can examine documents for patterns that relate to an existing theory (Elo & Kyngas, 2008). This method includes multiple stages. The first step is to select the data and theoretical lens to be applied (Elo & Kyngas, 2008). The individual policies are the sampling units for the content analysis (Stemier, 2001). Each unit that I coded, or individual word or sentence, is a recording unit (Stemier, 2001). These recording units are the pieces of data that illuminate trends or patterns in the ways each Forest Unit is using collaboration practices. Additionally, I contextualized the sampling units by defining the boundaries of data collection, which populations they are drawn from, and the environment in which these documents exist at each Forest Unit (Krippendorff, 2013).

Like every method, there are drawbacks to content analysis. Researchers must carefully approach their data and recognize when certain materials are not present (US

General Accounting Office, 1996). If a researcher makes thematic claims that rely on missing data, this could hinder the validity of the work. Additionally, reliability is a common concern related to content analysis. One way to combat this apprehension is by making the content analysis a repeatable process (Weber, 1990). As an independent researcher, I was unable to rely on another scholar to check for consistency. However, I used a method recommended by Margrit Schreiver (2013) in *Qualitative Content Analysis in Practice*, which involves testing a set of codes on a single piece of data to work out inconsistencies. After that, the researcher applies the code to all data, waits for a set amount of days, and then retests the code on the data to check for repeatability. In doing this, I was able to ensure that my code is fairly repeatable over time.

Upon concluding the coding process for all data, I built a matrix using the emergent results. This is an inductive method, as the Salmon-Challis and Manti La-Sal Forests are untested cases in collaborative studies. However, I based my matrix off of the best practices collaboration characteristics defined in the above section. This matrix is the tool from which I analyzed and made claims regarding the factors of best practice collaboration that the Forests Services and Units have engaged, or have yet to use at this stage of their planning revision processes. At this point, I made conclusions that hypothesize the implications of each Forest Units' level of engagement with collaborative techniques, and made suggestions about which best practices could be employed at this time to illicit desired outcomes.

Based on best practice collaboration literature, and what has been observed in past Forest Service collaboration case studies, I created the list of codes (best practices of

collaboration) that I used to conduct the content analysis on documents related to and produced by the planning revision processes at each Forest Unit.

CHAPTER 3

CASES

In this chapter, documents and policies from the Forest Service, the Salmon-Challis National Forest, and the Manti-La Sal National Forest are analyzed to assess how integrated best practice collaboration is. The first section compares three documents produced at the federal level of the Forest Service, meant to be used as tools by all Forest Units undergoing forest plan revision and the public. The following section will compare both the Salmon-Challis National Forest and Manti-La Sal National Forest public participation strategies and discuss how each Forest Unit has engaged differently with collaboration.

3.1 Federal Forest Service

The 2012 Planning Rule provides extremely broad and undefined explanation and expectations of collaboration. The Rule states that collaboration is:

> A structured manner in which a collection of people with diverse interests share knowledge, ideas, and resources while working together in an inclusive and cooperative manner toward a common purpose. Collaboration, the context of this part, falls within the spectrum of public engagement. (US Forest Service, 2012, p. 219)

Here, collaboration is defined broadly, but no further explanations of the types of actions

that collaboration consists of are provided. More specific information and details regarding the planning revision process and collaboration are found in the Forest Service Land Management Planning Handbook (2015), which the United States Forest Service updated to reflect the most recent planning rule (US Forest Service, 2015). The Forest Service Land Management Planning Handbook instructs "Responsible Parties" at each Forest Unit on specific actions that must be taken in accordance with the rule. A chapter titled "Public Participation" is the main focus of analysis here. It provides Forest Service Units with more tangible directives and tasks, some of which are collaborative. Additionally, the Participation Strategy aids individual Forest Units in the language, style, and document formats of their public participation strategies. It also serves as the main guide for a Forest Unit to engage the public throughout the Forest Plan Revision Process (US Forest Service, n.d.-p).

Possibly the most pertinent document produced by the National Forest Service office in regard to planning revision and the public is A Citizens Guide to Forest Planning. This document is meant for the public to read as an overview of the 2012 Planning Rule (US Forest Service, 2016a). Citing specific sections of the actual policy and summarizing points of possible participation, this document guides a reader through each phase of the plan revision. The guide was put together by a citizen group of experts who interpreted the plan.

3.1.1 Land Management Planning Handbook

The focus of analysis in regard to the Planning Rule is a chapter titled "Public Participation." While public participation is not the same as collaboration and certainly

not best practice collaboration, this document provides examples of some best practice collaborative factors. Section 43.1 titled "Guidance for Collaboration" focuses solely on collaboration, and the document as a whole provides valuable information. The chapter is a valuable resource for individual Forest Units who must create a public participation strategy as part of the Forest planning revision process. The outlined strategy serves as the main documentation that I examine in relation to the Salmon-Challis and Manti-La Sal Forests.

3.1.2 Public Participation Strategy Outline

This document serves as a resource for Forest Service employees and Responsible Officials as they begin the forest plan revision process. The Outline provides language and tips about how to write a public participation strategy. In parts, the Outline seems to suggest that the Forest Service is using participation as a means to create value for themselves and/or avoid conflict (US Forest Service, n.d.-p, p. 8). "Appendix A: Public Participation Requirements Checklist" is an extremely useful tool in identifying what is expected of Forest Units in interpreting collaboration based on the 2012 Planning Rule. This is the document that both the Salmon-Challis and Manti-La Sal Forests used to develop their public participation strategies. While this specific resource does not have an abundance of language to analyze, it provides a fascinating comparison between the suggested outline and the strategies developed by the two Forest Units under study.

3.1.3 A Citizen's Guide to Forest Planning

As mentioned above, this guide was written by a citizen committee and meant to interpret the Forest Plan revision process for citizens interested in being involved. In addition to providing an overall summary of how the public can be involved with the process, an entire section of the document focuses on major planning topics such as endangered species and range and grazing lands. This particular section was not a focus of this analysis because it provided more topic-specific information than interpretations of collaboration. Interestingly, as will be discussed below, some of the language that I have interpreted as problematic institutional culture in other documents is evident in this guide. This is unexpected because the guide was developed by non-Forest Service stakeholders.

3.1.4 Analysis

1. Engage Early: The Planning Handbook explicitly mentions the importance of early engagement of stakeholders stating: "Public participation opportunities should be provided early and throughout the planning process" (US Forest Service, 2015, p. 4). The Handbook recommends that involving the stakeholders in the creation of a public participation strategy, and thus before the plan revision process is underway, can alleviate potential conflict and identify resources (US Forest Service, 2015, p. 7). It states that early public engagement "will help ensure that the focus of the planning effort reflects public concerns and community" (US Forest Service, 2015, p. 10). There are multiple points in the planning process at which the Forest Service is required to engage the public

early, although much of the time, this type of engagement is a simple notification (US Forest Service, 2015, p. 9). The Public Participation Strategy Outline document does not provide extensive information regarding early engagement of the public. The Outline does state that "This strategy is a joint production between the Forest Service and those stakeholders" interested in the process (US Forest Service, n.d.-p, p. 1). The Citizen's Guide noticeably has very few mentions of early engagement of the public. The only direct example of early engagement of the public is in reference to the requirement of a Forest Unit to notify the public when it is about to begin the first phase of the plan revision process (US Forest Service, 2016a, p. 10).

Early engagement of the public as a best practice of collaboration is meant to lower the risk for potential conflict, engage stakeholders prior to any party becoming invested in solutions, and help frame the collaboration as a value creation process. While the Land Management Planning Handbook does explicitly mention the value of engaging the public prior to initiating the plan revision process, the other documents do not. The Public Participation Strategy Outline does not provide sufficient drafted content for a Forest Unit to be prompted to include early engagement in their strategy document. Thus, the only document providing the recommendation to Forest Units that they engage the public prior to beginning the revision process is the Handbook. It is less surprising then, that there is an absence of early engagement statements in the The Citizen's Guide to Forest Planning, given that the audience for this document is public stakeholders, who are not responsible for early engagement, and the Guide interprets the

Planning Rule, which does not mention early engagement. Forest Units would be wise to engage the public prior to initiating the 1st year of the plan revision process, and set a precedent of collaborative planning early on.

2. **Conduct a Situation Assessment:** There are two processes in which the Planning Handbook identifies the need to use aspects of a situation assessment, but the document does not explicitly call for a best practice situation assessment. Both the creation of the public participation strategy and the actual assessment phase of the plan revision process can include components of a situation assessment. The Handbook outlines that a public participation strategy should define the scope of the planning effort, explain the desired time frame of the effort, and identify the range of stakeholders including potential techniques for engaging those groups (US Forest Service, 2015, p. 6). The Handbook also recommends that "where divergent views are anticipated, time spent on public participation prior to drafting plan components can result in draft plan components that earn broad public support" (US Forest Service, 2015, p. 10). The 1st year of the plan revision process is called the "assessment phase." During this phase, rapid assessments are conducted on all aspects of the Forest Unit. Some of these assessments do include human factors, but there was no identification in this handbook that those assessments used best practices. While there are processes of assessment being employed, the document does not make clear the specific need for an assessment of the relevant stakeholders prior to a planning revision being initiated. This could be problematic for the future efficiency and sustainability of a plan revision.

The Public Participation Strategy includes quite a few statements referring to best practice situation assessments. The document states that in the pre-assessment phase, Forest Units should "think about and identify public participation objectives, stakeholders and tools or methods for public participation" (US Forest Service, n.d.-p, p. 6). This document includes an appendix that refers both to the preassessment and the engagement of diverse sets of stakeholders. Here, it is noted that a Forest Unit should "conduct a stakeholder analysis; conduct an internal capacity assessment and form your internal public involvement team; determine how you will develop strategic relationships with federal, state, local and tribal governments, who will be responsible for assisting with this; and produce and external agency communication plan" (US Forest Service, n.d.-p, p. 14). It also explains how Forest Units can ensure that they create an extensive list of relevant stakeholders (US Forest Service, n.d.-p, p. 17). The strategy document indicates that the purpose of a preplanning phase is to "identify public interests and concerns regarding the plan areas" (US Forest Service, n.d.-p, p. 8). Many of the best practices for collaboration and situation assessments are directly mentioned in this document. While the Public Participation Strategy Outline does not call for a formal situation assessment process, the steps for doing so are described. However, not defining the clear need for a stand-alone process that assesses stakeholder interests could mean that Forest Units combine processes in a way that might create challenges in the future.

The Citizen's Guide does not mention the preplanning phase, or the

creation of a public participation strategy as ways in which a Forest Unit might engage in a situation assessment process. The Guide does refer to aspects of the 1st year of the plan revision process, the assessment phase, as incorporating aspects of a situation assessment. The document states that during the assessment phase (US Forest Service, 2016a, p. 7), the Forest Unit will identify social conditions (US Forest Service, 2016a, p. 10), build a forest plan based on recognized needs, and clearly select stakeholders who will act as partners through the process (US Forest Service, 2016a, p. 18).

While the Land Management Planning Handbook provides very little in regard to best practices for conducting a situation assessment, the Public Participation Strategy Outline offers a fairly comprehensive explanation of the purposes and methods. Neither document explicitly recommends that a Forest Unit hire a neutral third party to conduct the assessment, but the Outline document does identify all of the aspects of a thorough situation assessment without clearly stating that it is an independent process. Clearly defining the process could help Forest Units recognize the importance of a situation assessment prior to initiating the plan revision or any possible collaborations. The Citizen's Guide does not clearly mention a situation assessment; this could be a place for the Forest Service to explain early that there may be a need for stakeholders to participate in an interview process prior to the plan revision process taking place. It is not surprising that we do not see a situation assessment mentioned in this document because there is no clear intention for a separate situation assessment process to occur in any of the Forest Service internal

documents.

3. Design and Effective Process, Based on the Situation Assessment: There is a large amount of content provided in the Planning Handbook in regard to best practices for designing an effective process. However, it should be noted that, because the Planning Handbook did not explicitly mention best practices for conducting a situation assessment, the processes being defined here are not based on what was learned from that process. The Planning Handbook identifies that the "Responsible Official," in most cases the Forest Supervisor for a specific Unit, will initiate, or convene, the collaborative process, but that a separate person may facilitate the effort (US Forest Service, 2015, p. 19). The Handbook provides a significant amount of information and recommendations regarding the process for engaging all relevant stakeholders (US Forest Service, 2015, p. 22). The document suggests that Forest Units design processes in which multiparty monitoring and planning can occur (US Forest Service, 2015, p. 12). In addition to the Forest Service acting as a process designer, the Handbook also recommends that "the development of a framework or set of ground rules will help sustain collaborative efforts, ensure fairness, and contribute to creating elastic expectations" (US Forest Service, 2015, p. 19). This is one of the few statements made in reference to the specific collaboration process rather than to the plan revision process as a whole.

The Planning Handbook speaks fairly frequently to the importance of processes in which information can be shared and generated amongst stakeholders. It states that "public participation promotes a common

understanding of facts and issues that form the context for planning and the planning process" (US Forest Service, 2015, p. 2). The Forest Service is also required to use what they define as Best Available Scientific Information. Because of this, the Handbook recommends that public participation and collaboration are a way in which a Forest Unit can ensure they are using Best Available Scientific Information (US Forest Service, 2015, p. 11).

The Public Participation Strategy, similarly to the Planning Handbook, makes frequent reference to the importance of designing an effective collaborative process. The Outline recommends that Forest Units identify the name and title of the individual who will serve as the convener (US Forest Service, n.d.-p, p. 2). The document reminds Forest Units that prior to writing their public participation strategy, they should "brainstorm and identify stakeholders and their points of contact" (US Forest Service, n.d.-p, p. 4). This brainstorming should involve Forest Units identifying who the key decision makers are and who might be most impacted by a forest plan revision (US Forest Service, n.d.-p, p. 17).

The Outline describes that a public participation strategy should serve as a tool and road map for the public and Forest personnel as a way to clearly explain the organization of the plan revision process (US Forest Service, n.d.-p, p. 3). The Outline indicates that Forest Units should include explanations of public participation strategies in their strategy documents including collaborative efforts (US Forest Service, n.d.-p, p. 7). In the appendix of the Outline, the document refers to Best Available Scientific Information and the ability to gather public feedback and reliable information from stakeholders as part of the process (US

Forest Service, n.d.-p., p. 15). These aspects of clear process, and an effort to create ways in which information can be shared amongst stakeholders, follow the identified best practices of collaboration.

Just as the two internal Forest Service documents mention aspects of effective collaborative process design, the Citizen's Guide refers to best practices relatively often. The Guide identifies the Forest Supervisor as convener of the plan revision process (US Forest Service, 2016a, p. 6). This document in particular emphasizes that the 2012 Planning Rule requires Forest Units to reach out to diverse groups of stakeholders (US Forest Service, 2016a, p. 6). This means that Forest Units will engage youth, low-income, and minority populations (US Forest Service, 2016a, p. 6). This document also explains the process and timeline of the plan revision process more than the other two documents (US Forest Service, 2016a, p. 7). This is most likely due to the differing intended audiences.

The Guide also emphasizes the importance of sharing information amongst all stakeholders (US Forest Service, 2016a, p. 8). The document states "During the assessment process, the Forest Service will seek out relevant existing information from a variety of sources, which may include federal and state agencies, tribes, research entities, and the public" (US Forest Service, 2016a, p. 9). It goes on to mention that if stakeholders or entities are involved in collecting data or monitoring a Forest Unit, they should share their information to aid in improving future management (US Forest Service, 2016a, p. 18). While the document does not put forward a particular method or process in which stakeholders can share information or participate in joint fact finding, the

understanding is that specific details will be conveyed in individual public participation strategy documents constructed by Forest Units.

The three Forest Service documents do a fairly thorough job expressing the best practices for designing an effective process based on a situation assessment. As mentioned previously, none of the documents explicitly mention that Forest Units should conduct a clearly defined situation assessment, so the recommendations for developing an effective process are not grounded in a true understanding of the situation at a particular Forest Unit. However, these documents do identify a convener, recommend ways to engage a diverse range of stakeholders, explain clear processes, and state the importance of information sharing.

Some of the nuance of the best practices for designing an effective collaborative process are not addressed in these documents. None of the documents deal directly with the challenges of conflict between stakeholder groups that can lead to certain interests not being represented. The documents also fail to explain clear processes in which information can be shared, or how joint fact-finding processes should be conducted. Instead, information sharing is treated only as open communication.

4. Administer an Effective Process: The Planning Handbook offers some recommendations regarding best practices for administering an effective collaborative process. One of the clearest examples of best practice collaboration expressed in the Handbook is in reference to the use of a neutral facilitator. The document states “Many successful collaborative groups are led by external

partners" (US Forest Service, 2015, p. 19). The document goes on to explain that the use of an external facilitator must be done with care not to become a violation of the Federal Advisory Committee Act, which restricts the use of external committees to make decisions regarding federal agencies (US Forest Service, 2015, p. 19). There are a few mentions of interests-based problem-solving in the Handbook, although not directly in reference to collaborative processes. The Handbook states that a management plan should "contribute to common objectives, address impacts, and resolve and contribute to compatibility between the Forest Service and other agencies' plans" (US Forest Service, 2015, p. 23).

The Handbook also identifies that collaboration "helps build and maintain working relationships, trust, capacity, and commitment to the plans" (US Forest Service, 2015, p. 2). Later, the document recommends that the Forest Units support relationships between the agency and the public, as well as between different stakeholder groups (US Forest Service, 2015, p. 9).

The Strategy Outline does not mention many of the best practices for administering an effective collaboration. This may be because this Outline is instructing Forest Units on how to most effectively create a plan for the process, and does not provide many tangible ways for Forest Units to implement the strategy. However, the Outline does mention that the Forest Unit should provide opportunities for stakeholders to discuss interests (US Forest Service, n.d.-p, p. 7). The document also urges Forest Units to "think about how this strategy may guide the relationships and important connections within these groups" (US Forest Service, n.d.-p, p. 1). The Outline mentions specifically that public participation

and collaboration will reinforce and build relationships (US Forest Service, n.d.-p, p. 6).

While both the internal Forest Service documents express aspects of best practice administration of a collaboration, the Citizen's Guide does not. This is somewhat expected, given that the Forest Service is under the assumption that Forest Units will largely be responsible for administering the collaborative process. The Handbook does recommend that Forest Units look to external partners for aid in administering collaborative efforts. There are not very many examples of statements suggesting best practice administration of the process in either the Handbook or the Outline. It is expected that in the Outline, there might be fewer examples given that this document is meant to outline the process. The Handbook, however, should have more recommendations for best practice administration given that the document is meant to aid Forest Unit officials in administering a planning revision process. None of the documents take much time to explain the importance of interest-based problem-solving. These are all active processes that must occur during a best practice collaboration.

5. Meaningfully Engage the Public: There is a distinct weight placed on the importance of providing a wide range of ways in which the public can participate in the plan revision process throughout the Handbook. The document stresses that Forest Units should provide a "range of options for the public" (US Forest Service, 2015, p. 4) and that "public participation opportunities should be designed to allow for input from a broad range of people" (US Forest Service, 2015, p. 5). There are multiple suggestions that Forest Units consider providing

opportunities that will cater to diverse ranges of stakeholders (US Forest Service, 2015, p. 20).

The Outline does express that Forest Units should consider the range of public participation opportunities that are available. Additionally, the Outline suggests that, if there is effort being placed into a time-intensive collaborative, a Forest Unit offer different opportunities such as open houses or online forums to include more members of the public (US Forest Service, n.d.-p, p. 7). While the Citizen's Guide would not expectedly have recommendations or statements regarding how to successfully engage the public, given that the audience for this document is the public, it still encourages people to get involved via activities such as conference calls, meetings, and field trips (US Forest Service, 2016a, p. 6).

Throughout the documents, there seems to be a distinct worry that if a Forest Unit puts too much effort into a collaboration, they will forget to include other members of the public who cannot participate in a time-consuming group. There is a lot of emphasis placed on the importance of a wide range of meaningful ways to engage the public that cater to diverse audiences. The documents make explicit references to a spectrum of participation that closely follows those cited early by the International Association for Public Participation.

6. Ensure There Are Sufficient Resources Set Aside: The Handbook suggests that a public participation strategy should "identify resources needed…to support public participation opportunities. Identify resource gaps" as well (US Forest Service, 2015, p. 6). The Handbook mentions that Forest Units should only

commit to collaboration methods that are within the "capacity and fiscal capability of the planning unit and the public" (US Forest Service, 2015, p. 6). The Strategy Outline document does not mention the need to ensure there are sufficient resources for the collaborative process. This was presented as an internal process in the Handbook, and thus it is not expected that the Outline for a document aimed at the public would include information about identifying resources. The Citizen's Guide does explicitly mention the need for sufficient resources, but it is in regard to the monitoring phase of the plan revision process, and not collaboration directly. The Guide states "The Forest Service must have the money and ability, including support from partners" (US Forest Service, 2016a, p. 17). However, the Guide focuses on the monitoring phase as an opportunity for the Forest Service and public to collaborate in the process of monitoring, collecting data, and creative problem-solving.

The Forest Service seems to be concerned that collaboration will take more time and resources than are within the limits of the plan revision process. This was mentioned in both the Handbook and Citizen's Guide. However, while resources came up semifrequently in both documents, they are not mentioned in the Outline. The Forest Service also urges Forest Units to take into account their available resources prior to engaging in the planning process, while also suggesting that Units should explore ways to capitalize on other stakeholder's resources as well.

3.1.5 Forest Service Documents Conclusion

The three Forest Service documents analyzed above engage to various degrees with each of the six defined aspects of collaboration. The Handbook stressed the need for Forest Units to engage early with the public. None of the documents explicitly state the need for an independent situation assessment process, but the Outline identifies all of the best practices identified in Chapter 2. All of the documents place heavy emphasis on designing an effective process design, some aimed directly at collaborative decision-making, and others at the process as a whole. The administration of an effective process was mentioned less frequently in the documents, but the Handbook does recommend the use of an external facilitator, a very positive step towards best practice collaboration. The documents all frequently mention the need to provide meaningful opportunities for public engagement, keeping in mind the need to accommodate different abilities and time commitments. All of the documents also address the need for sufficient resources, and the Guide recognizes that some of these costs may be shared amongst stakeholders.

Two clear items lacking in the three documents are the recommendation for a clear and independent situation assessment, and the need to administer a collaboration with best practices that may be external from those used for the rest of the planning process. Additionally, all of the documents use some problematic language in regard to engagement with the public. The Forest Service typically refers to public engagement activities as "opportunities" for the public to engage with the plan revision process. Instead, framing the activities as opportunities for the Forest Service to work with the public might better situate the Forest Service as an eager collaborator. Surprisingly, some of the most prominent examples of this type of language appear in the Citizen's Guide,

which was written by a group of stakeholders who do not work for the Forest Service. Statements like "if you want to be involved, you should become familiar" (US Forest Service, 2016a, p. 15) imply that citizens are responsible for engaging with the Forest Service. This places the burden onto the stakeholders and removes the responsibility of convener from the Forest Service. Later in the analysis of the two Forest Unit Participation Strategies, it becomes compelling to examine how both Forest Units use these types of statements much differently.

By examining these three documents, produced for the purpose of aiding individual Forest Units and the public in public participation and the plan revision process, we can now observe how best practice collaboration was carried out in documents produced by both the Salmon-Challis and Manti-La Sal National Forests. Both Forest Units have produced a public participation strategy that is rooted in the 2012 Planning Rule, aided by the Handbook and Strategy Outline. Thus, we can examine how the strategies are similar or different from one another and begin to ask what has caused some of the different practices or language to emerge.

3.2 Salmon-Challis National Forest

The Salmon-Challis National Forest is in year 1 of the 4-year planning process. Prior to initiating the revision process, the Salmon-Challis contracted the National Forest Foundation to conduct a stakeholder assessment and provide a summary of interests as well as recommendations for using collaboration in the revision process (US Forest Service, 2016d, p. 1). Following the National Forest Foundation recommendations as well as public meetings, Salmon-Challis drafted a Public Participation Strategy and

related presentations. These documents provide an illustration of how the Salmon-Challis intends to use practices of collaboration in the plan revision process. While this process is ongoing, and outcomes are still unknown, we can use these documents as a case of how the Forest Unit plans to use collaboration, and examine later if there are factors that determine its use.

In newspaper articles from the communities around the Salmon-Challis National Forest regarding the plan revision, it is clear that Forest Service personnel have been reaching out in unique ways to the public. In March 2017, an article quotes the Forest Plan Revision team leader Josh Milligan of the Forest Service saying "we know we can't do this plan revision in a vacuum, and collaboration with the public will be critical to its success…this isn't the start of a typical public comment period…we want to know if people think we're on track and if we're using the best available information" (*The Challis Messenger*). This article also provides clear information about the revision process, and the contact information for the collaboration specialist at the Salmon-Challis National Forest. In another article by the Idaho Falls *Post Register*, the paper states that the Salmon-Challis Forest Unit seeks public input on a range of topics. This article uses language that implies the Forest Service will be educating the public and is interested in a much less involved role for the public (*Post Register*, 2017).

3.2.1 Salmon-Challis National Forest Plan Revision Public Participation Strategy Draft

This is a draft document of the Salmon-Challis Public Participation Strategy for the Forest Plan Revision. The Forest Unit states that this is a document intended to guide

the Unit through the 15-20 years that the plan is in place. The Salmon-Challis contracted with the National Forest Foundation to conduct a stakeholder assessment prior to beginning this strategy and planning process (US Forest Service, 2016d, p. 8). In addition to the strategy document, the Forest Unit put together a PowerPoint presentation meant to inform the public about the process the Forest Service must go through to revise their management plan, and how the public can get involved. The presentation states "The move from informing the public to collaborating with the public takes greater time and investment but we are counting on it leading to more sustainable results with improved trust and ownership" (US Forest Service, 2017, p. 61). This PowerPoint is supplementary to the Public Participation Strategy.

3.2.2 Perceptions About Opportunities for Collaboration During the Salmon-Challis National Forest Planning Process Assessment Summary and Themes September 2016

The National Forest Foundation was contracted by the Salmon-Challis National Forest to conduct a stakeholder assessment. This document is a summary of interviews with 28 stakeholders in the region. Each interviewee was asked the same list of questions and their answers were anonymized and put into thematic lists in this document. Generally, stakeholders felt a strong connection with the land and a need to emphasize local relationships. In regard to relationships to the forest, stakeholders expressed a desire to be heard, to work in partnership with the Forest, and to address issues with changing personnel and the threat of litigation. Interestingly, there was an interest to have the Forest Service planning and Bureau of Land Management planning work in coordination

with one another. There was a distinct wish for a formal collaboration in addition to the existing public meetings. Following the stakeholder assessment conducted by the National Forest Foundation (NFF), they complied a list of recommendations and opportunities for the Salmon-Challis National Forest to utilize in attempts to collaborate.

3.2.3 Analysis

1. Engage Early: The Salmon-Challis Public Participation Strategy does not mention the need for the Forest Unit to engage stakeholders early, other than the legally required public notifications that the Forest Unit must send out. The situation assessment and recommendations provided by the National Forest Foundation also do not mention early engagement as a best practice. By contracting with a third party to conduct a situation assessment, and holding public meetings prior to beginning the revision process, the Salmon-Challis did engage early with the public.

2. **Conduct a Situation Assessment:** The Salmon-Challis National Forest hired the National Forest Foundation to conduct a neutral situation assessment in which they interviewed a variety of stakeholders to collect interests and context for the plan revision process. In addition to the act of hiring a third party to conduct a situation assessment, there were many examples of best practices in the Strategy and documents created by the National Forest Foundation.

The Salmon-Challis "conducted outreach to the public to assess stakeholder interest, capacity and willingness to participate in collaborative and other public involvement process" (US Forest Service, 2016d, p. 5). While the

National Forest Foundation had conducted a situation assessment, citizen-led meetings about public land management were also conducted, and the Salmon-Challis took the information from those meetings into account when drafting the Participation Strategy (US Forest Service, 2016d, p. 8). The Strategy also notes that community groups and the forest had been prepping for the revision process long before it was set to begin (US Forest Service, 2016d, p. 9).

The National Forest Foundation produced two documents following the situation assessment they conducted for the Salmon-Challis National Forest. These documents summarized interests and provided recommendations for the planning process. The assessment states "A collaborative assessment is a standard tool in collaboration…used to clarify important issues, identify key stakeholders, and generate process options and recommendations" (National Forest Foundation, 2016a, p. 1). The National Forest Foundation interviewed 28 people and provided a list of shared interests and necessary stakeholders.

3. Design an Effective Process Based on the Situation Assessment: Following the situation assessment conducted by the National Forest Foundation, the Salmon-Challis was well set up to design an effective collaborative process based upon the results of their assessment. There are many examples of statements in reference to effective process design in the Salmon-Challis Public Participation Strategy. The Salmon-Challis identifies that while they will play some role in convening the plan revision collaborative, the Salmon-based nonprofit, Salmon Valley Stewardship, has already been holding meetings regarding revision and they may be a necessary co-convener (US Forest Service, 2016d, p. 9). The Forest

Unit clarifies that in the case of ongoing collaborative efforts in the region, the Forest Service may attend meetings, but needs to be cautious of infringing on the Federal Advisory Committee Act.

The Salmon-Challis Strategy frequently mentions the strong emphasis it places on engaging a diverse set of stakeholders. They note the need to clearly communicate with the public, but also internally amongst Forest Service personnel (US Forest service, 2016d, p. 3). The Forest Unit writes that they want to "foster an inclusive, transparent process that strengthens plans and adds clarity to the decision making process and the rationale for decisions" (US Forest Service, 2016d, p. 3). They do this by clearly defining the processes and organizational structure for the collaboration. The Strategy also mentions that the Forest Service will pay close attention to the individual roles and responsibilities of each stakeholder in the process (US Forest Service, 2016d, p. 8). Salmon-Challis expresses that they want to "support shared learning and understanding between the Forest Service and public participants" (US Forest Service, 2016d, p. 3). To do this, they will hold meetings that inform the public of data that the Forest Unit has, and ask for their input (US Forest Service, 2016d, p. 6). The Participation Strategy states that "Most people are familiar with traditional public involvement where the Forest Service has a decision to make and uses formal engagements and comment periods to solicit public opinions and thoughts on the decision. While this process is helpful, it falls short of 'learning' from other perspectives and the formality of the process can exclude some participants" (US Forest Service, 2016d, p. 7). There is a strong emphasis in the Salmon-Challis

Strategy in regard to supporting dialogue and open communication concerning information and data (US Forest Service, 2016d, p. 9).

The documents produced by the National Forest Foundation also provide a lot of statements that refer to best practices for designing an effective collaborative process. It is recommended that the Forest Unit capitalize on the already established meetings held by Salmon Valley Stewardship, which has respect from the local community (National Forest Foundation, 2016a, p. 2). The National Forest Foundation also identified that stakeholders were interested in a formal and maintained collaboration instead of relying only on public meetings (National Forest Foundation, 2016a, p. 3). Thus, it was recommended that the collaboration have a set membership so that relationships and interests can develop over time (National Forest Foundation, 2016b, p. 4).

4. Administer an Effective Process: Both the Public Participation Strategy and National Forest Foundation documents provide less content on administering an effective collaborative process. However, there are still examples of best practices in the text. The Salmon-Challis identified that its role will be to "help identify or clarify issues, conflicts, constraints, values, beliefs, or expectations" (US Forest Service, 2016d, p. 3). The Strategy mentions fieldtrips and workshops as possible methods for helping the collaborative process get to interest-based problem-solving (US Forest Unit, 2016d, p. 20). The National Forest Foundation documents note that in hiring a collaborative specialist, the Salmon-Challis National Forest demonstrated their commitment to collaboration and effective processes (National Forest Foundation, 2016d, p. 3). The National Forest

Foundation identified common interests shared by stakeholders in the assessment interviews (National Forest Foundation 2016a, p. 4). The documents also suggest that the Forest Service can repair relationships with the public via collaboration.

5. **Meaningfully Engage the Public:** The Salmon-Challis Public Participation Strategy defines low, medium, and high levels of participation for the public. These range from simple comment periods to fully involved collaborative efforts (US Forest Service, 2016d, p. 6). If stakeholders are to agree to a high level of participation, the Strategy defines that commitment as a willingness to "participate in collaborative group. Agreeing to meet with other stakeholders on a frequent basis to come up with solutions to complex issues raised during the Plan Revision process. Helping the collaborative and the Forest Service share information about key public involvement milestones and the pros and cons of the draft plan, as you see it" (US Forest Service, 2016d, p. 11). The NFF identified that multiple approaches to public engagement were needed based on their situation assessment (National Forest Foundation, 2016a, p. 2).

6. Ensure There Are Sufficient Resources: The Strategy document states the the Forest Unit has identified its own internal capacity and needed resources for the planning effort (US Forest Service, 2016d, p. 5). They also state that plan revision processes "use time and resources, both that of the public and the agency" (US Forest Service, 2016d, p. 3). The goal stated is to use those resources efficiently.

3.2.4 Conclusion

The Salmon-Challis National Forest demonstrates many of the characteristics of best practice collaboration. While the Unit does not specify the need to engage the public early, they do this in practice. Hiring the National Forest Foundation to conduct a situation assessment closely followed best practices. However, the documents examined in this analysis show the conflation of public engagement and collaboration process. The process design and administration factors noted in the analysis of the Public Participation Strategy are often referring to public participation at large. There are not many indicators that the Salmon-Challis sees collaboration as a stand-alone process.

3.3 Manti-La Sal National Forest

The Manti-La Sal National Forest is in year 2 of the planning revision process. In year 1, they completed rapid assessments of the social, ecological, and economic conditions in the National Forest. Now they are in the process of drafting plan revisions, and conducting Environmental Impact Assessments. The Manti-La Sal did not reach out to a third-party contractor to conduct a situation assessment. There is no information available to the public about the kinds of techniques this Forest Unit used to assess stakeholders or interests prior to beginning the plan revision process.

In an article published by the *Sun Advocate* regarding the Manti-La Sal plan revision process, Sherman (2016) writes that the Forest Service is "asking the public to take part in the process." The article summarizes a recent open house with the Manti-La Sal in which the public was encouraged to fill out a survey and take informational pamphlets about the process. In another article, Mark Pentecost, the Forest Service

Supervisor for Manti-La Sal, was quoted saying "It's important to us that you stay informed, and that we get input from (councils) and local citizens" (Trenbeath, 2016). Blake Bassett is cited in this article as the Forest Plan Revision Partnership Coordinator and quoted saying that he wants to ensure public participation is a part of the process. Interestingly, the article cites that members of the public expressed concern that the process may get as contentious as the recent Master Leasing Plan process by the Bureau of Land Management. Further complicating the plan revision process, recently a portion of the Manti-La Sal National Forest was incorporated into the new Bears Ears National Monument. This designation creates management changes and necessary policy adjustments for the personnel at Manti-La Sal, which takes capacity away from the plan revision process.

3.3.1 Manti-La Sal National Forest Plan Revision Public Participation Strategy

The Manti-La Sal National Forest Plan Revision Public Participation Strategy is a document meant to "provide a road map for how the Interdisciplinary Team will inform, engage, and collaborate with the public during each phase of the Planning process" (US Forest Service, 2016c, p. 2). This document clearly explains each of the three phases of the revision process, and how the Manti-La Sal plans to provide public participation opportunities. The document also provides a list of names of relevant stakeholders, and outreach strategies.

3.3.2 Manti-La Sal National Forest Plan Revision Communication Plan

This document is meant to "provide operational direction for lower-level project-specific plans" (US Forest Service, 2016c, p. 2). This means that the document serves as an outline of how the Forest Unit will communicated throughout the plan revision process, but provides more communication strategies for each component of the plan as necessary. This document did not provide much context for best practice collaboration and thus it was not included for further in-depth analysis.

3.3.3 Analysis

1. Engage Early: The Manti-La Sal Participation strategy does not mention the plan to engage the public early. While the Manti-La Sal did not conduct a formal situation assessment, they did hold public meetings prior to initiating the plan revision, and may have done assessments that are not recorded in these documents.

2. **Conduct a Situation Assessment:** While the Manti-La Sal did not conduct a formal situation assessment like the Salmon-Challis, they still mention the process of assessment in their participation strategy. The document states that the Forest Unit will "conduct outreach to the public to analyze stakeholder interests and forest capacity for collaboration, conduct meetings and briefings, and utilize those findings to develop further public participation strategies" (US Forest Service, 2016c, p. 6). The Forest Unit also mentions that they will identify areas of collaboration that are worth the time and effort it will take to be successful (US Forest Service, 2016c, p. 25).

3. Design an Effective Process Based on the Situation Assessment: While the Manti-La Sal did not conduct a formal situation assessment, their Public Participation Strategy has many examples of best practices for designing an effective collaborative process. The Strategy has a list of key stakeholders and identifies outreach tools for each group (US Forest Service, 2016c, p. 21). Manti-La Sal also acknowledges that there is a hierarchy involved in any Forest Service collaboration (US Forest Service, 2016c, p. 6). They take time to clearly define the role of each person involved in the plan revision process (US Forest Service, 2016c, p. 23). The Strategy plainly states that "collaboration design will be determined by those participants who are willing to spend the time and effort required to be part of a collaboration effort" (US Forest Service, 2016c, p. 24). The strategy also outlines a list of ground rules and hopes for the collaborative effort such as a desire to maintain stakeholder membership throughout the effort (US Forest Service, 2016c, p. 25).

The Manti-La Sal Public Participation Strategy situates itself as a document that provides "the framework for gathering and disseminating information" (US Forest Service, 2016c, p. 4). The Forest Service seeks to "support shared learning and understanding…and promote a common sense of facts and issues" (US Forest Service, 2016c, p. 4). The Forest Unit seeks public feedback regarding the use of Best Available Scientific Information (US Forest Service, 2016c, p. 16). The Strategy states that stakeholders are expected to bring information to the table during this process (US Forest Service, 2016c, p. 25).

4. Administer an Effective Process: Similarly, the Manti-La Sal does not spend

as much time defining the practices they will employ in administering an effective collaborative process. They do however, state "When 'substantial agreement' emerges from a variety of plan revision articles (e.g., collaboration, cooperation, consultation, public involvement), the Forest Leadership will carry forward these ideas into the development of the Plan to the extent that it is legally permissible" (US Forest Service, 2016c, p. 25). This commitment to collaborative problem-solving is a huge factor in best practice collaboration. The Manti-La Sal states the they hope the public participation strategy will "help build and maintain working relationships, trust, capacity, and commitment to the Forest plan revision" (US Forest Service, 2016c, p. 4). Through strong relationships, the strategy suggests that more data will be shared amongst groups (US Forest Service, 2016c, p. 15).

5. Meaningfully Engage the Public: The Manti-La Sal Public Engagement Strategy also references the need for multiple ways to engage the public in the plan revision process. They do not provide a scale of low-high involvement examples throughout the strategy like the Salmon-Challis does, but they do state "the Manti-La Sal Forest stakeholders are diverse, and so too must be the engagement methods used to reach them" (US Forest Service, 2016c, p. 21).

6. Ensure There Are Sufficient Resources: Similarly to the Salmon-Challis Strategy, the Manti-La Sal document states that the Forest Unit worked internally to identify capacity and resources (US Forest Service, 2016c, p. 6). The strategy says that "the Forest will provide most of the 'staff' work to support collaboration and public participation activities" (US Forest Service, 2016c, p. 25). However, participants in collaboration are expected to bring some resources or capacity to

the table (US Forest Service, 2016c, p. 26).

3.3.4 Conclusion

The Manti-La Sal National Forest did not follow the process necessary to carry out a best practice collaboration. By not conducting a formal situation assessment, the best practices they exhibit in process design and administration are not rooted in an understanding of interests and conflicts in the region. The strategy document does acknowledge a stand-alone process of collaboration, stating that they will do their best to incorporate consensus decisions made by a collaboration, but most of the examples analyzed here of best practice factors were conflations of public engagement with collaboration.

3.4 Analysis Conclusion

Upon analyzing all of the documents, it is clear that the Forest Service, both at the federal and Unit levels, has incorporated some aspects of best practice collaboration, and left other crucial aspects out. It appears that while the Forest Units did not specify their intentions to engage early, through public engagement prior to beginning their plan revision processes, both Units have practiced early engagement. The federal documents did not specify the need for an independent situation assessment, but the Salmon-Challis conducted an assessment process with a third party, following best practices even though the federal documents did not recommend this practice. The Manti-La Sal did not complete this formal process. Documents from both Forest Units and the federal agency placed great emphasis on designing an effective process for the planning process as a

whole. However, there was less intention put into the design of a collaboration process specifically, but both Units do mention the needs for clearly designed collaborative efforts.

The federal documents and Forest Unit strategies mention the need for best practices in the administration of a collaborative process far less than they refer to the design. The Units do not identify that they will use a third-party facilitator in the process of collaboration. However, they do briefly refer to strategies for supporting interest-based problem-solving. This could be emphasized much more to ensure that interests are the focus of dialogue. All of the documents analyzed provide a great amount of context in regard to meaningfully engaging the public. The Units provide many examples of ways in which they will reach out to new communities, and allow for diverse engagement opportunities. The documents also all refer to the need to identify resources, and keep collaboration efforts within the constraints of those resources.

There is a frequent conflation of public participation and collaboration found in most of the documents. The collaborative process is not often mentioned as separate from other types of engagement. However, the Land Management Planning Handbook seems to note the distinction stating "moving from informing to collaborating takes time but it can lead to more sustainable results with improved trust and ownership" (US Forest Service, 2015, p. 7). The strategy documents both note that traditional public participation falls short of "learning" from other stakeholders. It is clear that the agency has identified that public participation and collaboration are distinct processes, but in practice, these documents do not do enough to specify each entity on its own.

While not part of the coding for best practice collaboration, the Forest Unit

documents were examined for their usage of inclusive or distancing language in regard to the public. The federal documents largely used language that distances the public from the Forest Service and frames the plan revision process as an opportunity for the public, rather than the agency. Statements such as "The intent of public participation in the assessment phase is to provide the opportunity for the public to share its knowledge of existing forest conditions" (US Forest Service, 2015, p. 9) frame public participation as an opportunity for the public. The statement above refers to the public sharing crucial data with the Forest Service that can make the plan revision process easier for the Forest Service.

Given that the federal plan revision documents use language that separates and creates hierarchy between the Forest Service and the public, we might expect to see similar language in the documents produced by the Forest Units. However, the Salmon-Challis uses distinctly different language to frame public involvement. The Strategy document states "The Forest Plan Revision gives the Salmon-Challis National Forest staff an unprecedented opportunity to work with surrounding communities" (US Forest Service, 2015, p. 12). In this statement Salmon-Challis situates itself as the organization with an opportunity to learn from the public. In juxtaposition to the Salmon-Challis's use of inclusive language, the Manti-La Sal more closely resemble the federal documents. The Forest Unit Strategy states that they will "provide the opportunity for the public to share its knowledge" (UF Forest Service, 2016c, p. 15). Positioning the Forest Service as the agency that has an opportunity, versus the public, promotes a sense of inclusivity that could aid in the ease of establishing a successful collaboration. The two Forest Units are given a score from 0-3 in Table 3 based on how successfully they mention best practices

of collaboration in their public participation strategies and related documents. 0 indicates that a Forest Unit did not follow the best practice at all, while 3 means that they followed the best practice and all of its subfactors. There is an explanation of how the Forest Unit did or did not follow each of the characteristics as well.

In the final chapter, I will explain what the inclusion and exclusion of specific best practices for collaboration could mean for each Forest Unit. I will also explain the limitations and successes of this type of examination. Additionally, I will provide the context for future possibilities of this research.

Table 3

Salmon-Challis and Manti-La Sal Use of Best Practice Collaboration		
Collaboration Factor	**Salmon-Challis Public Participation Strategy**	**Manti-La Sal Public Participation Strategy**
1. Engage Early a. Engage prior to stakeholders becoming invested in solutions b. Collaboration is seen as "co-creation" process	**0** This document does not reference early engagement. However, through contextual evidence (newspapers, webpages), it is clear that the Forest Unit did engage early.	**0** This document does not reference early engagement. However, through contextual evidence (newspapers, webpages), it is clear that the Forest Unit did engage early.
2. Conduct a Situation Assessment a. Identify a clear need for/opportunity for collaboration b. Understand history of conflict and/or collaboration c. Identify stakeholders d. Conducted by a neutral/outside party, credible e. Appropriate time for collaborative process	**3** a. The NFF situation assessment identifies capacity and willingness to participate in collaboration. b. The NFF situation assessment identifies points of possible conflict such as history of not involving public. c. The NFF assessment provides a list of possible stakeholders, the Salmon-Challis strategy also identifies stakeholders. d. The Salmon-Challis hired NFF to conduct the situation assessment e. The assessment identifies that the process needs to be clear to complete a plan revision in time, but that it is an appropriate setting to conduct a collaboration.	**1** There was not an independent situation assessment conducted at the Manti-La Sal. The participation strategy document states they will analyze stakeholder interest and identify areas of collaboration.

Table 3 Continued

Collaboration Factor	Salmon-Challis Public Participation Strategy	Manti-La Sal Public Participation Strategy
3. Design an Effective Process Based on the Situation Assessment a. Appropriate convener convenes collaborative effort i. Co-convening may be appropriate ii. Credibility/ legitimacy b. Engage all relevant stakeholders i. Legitimacy of stakeholders ii. Stakeholders are interdependent iii. Build on local leadership c. Effective organizational principles i. Clear process and guidelines ii. Nonhierarchical iii. Clearly defined outcomes and goals iv. Timing (is there enough time, is now the right time?) d. Develop effective processes for information sharing, mutual learning, and resolving "fact-based" disputes i. Joint fact finding ii. Collaborative learning forums	**2** - The Forest Unit identifies itself as a convener but also recognizes that the Salmon-Valley Stewardship may serve as co-convener because of its position in the community. - The strategy suggests ways to engage all stakeholders. - The document does not express a method or process of a stand alone collaboration but does mention using existing efforts. - The strategy mentions promoting shared learning and information flows, but doesn't explain methods for doing so.	**1** Because the Manti-La Sal did not conduct a formal situation assessment, their process design for a collaboration cannot be based on best practice. However, they did include aspects of best practices for an effective process in their participation strategy. a. The Manti-La Sal identifies itself as convener and does not mention a co-convener. b. The participation strategy goes to great lengths to identify stakeholders and methods for outreach to those stakeholders. c. The strategy does suggest that collaboration time will be determined by limits of group members. d. The strategy document methods the need for stakeholders to share information during the process but does not provide a structure for this process.

Table 3 Continued

Collaboration Factor	Salmon-Challis Public Participation Strategy	Manti-La Sal Public Participation Strategy
4. Administer an Effective Process a. Effective facilitation i. Neutral in most situations ii. Best practices for facilitation defined b. Facilitate/support interest-based negotiation/ problem-solving i. Emphasis on value creation ii. Identify and use objective criteria c. Invest in building and maintaining relationships /trust ii. Processes like field trips d. Work toward an implementable solution i. Explore all possible limitations to effective implementation ii. Possible ongoing collaboration post-decision iii. Adaptive management e. Mandate and continually double-check that two-way information exchange is happening	**2** a. The Salmon-Challis has hired a collaboration specialist who may serve as a nonneutral facilitator. b. The strategy and related documents mention identifying shared interests and ensuring that stakeholders represent all interests. The document does not mention how a process will be designed to emphasis value creation. c. Salmon-Challis positions itself as having the opportunity to build relationships with the public through the process. d. There is no discussion in the strategy document of working towards implementable solutions. However, the document does mention the need for ongoing collaboration. e. The strategy does not speak to a process for two-way information exchange.	**1** a. There is no mention of facilitation or the use of third-party facilitation in the strategy document. b. The document does not mention interested based problem solving. c. The Manti-La Sal documents mention the need to build strong relationships so that information can be shared across groups. d. The strategy document does an impressive job at clarifying how the agency will work with the public towards implementable solutions. The Unit clarifies that ideas generated from a collaboration will be carried forward as best as they can be. e. There is not mention of two-way information exchange in this document.

Table 3 Continued

Collaboration Factor	Salmon-Challis Public Participation Strategy	Manti-La Sal Public Participation Strategy
5.Meaningfully Engage the Public a. IAP2 spectrum b. Public engagement process parallel to collaboration	**3** a. The Public Participation Strategy is a document meant to highlight the variety of ways the public can engage in the process. The document provides a wide range of activities and outreach methods to involve a diverse range of stakeholders. The strategy provides examples of low, medium, and high levels of participation. b. Through the scale of involvement provided in the strategy document, there is an explanation that collaborative processes will run parallel to other types of public engagement.	**2** a. The Manti strategy does speak to the spectrum of engagement, but less directly than the Salmon-Challis document. b. The Manti strategy does not mention the need for other types of public engagement to run parallel to collaboration.
6.Ensure there are Sufficient Resources a. Resources including money, personnel, and time b. Sharing costs and resources **c.** Identify costs and resources	**3** a. The strategy recognizes that resources include time, personnel, and space. b. This document does not directly mention the sharing of costs for collaboration, but does note that other stakeholder could bring value. c. The document notes that they have identified internal capacity for the overall plan revision process.	**3** a. The Manti strategy notes that collaboration and the plan process needs resources. b. The strategy states that it is expected that participants of a collaboration would bring their own resources into the group. c. The strategy notes that the Manti identified it's own capacity during the preparation phase.

CHAPTER 4

CONCLUSION

4.1 Summary of Findings and Suggestions for the Forest Service

Since the 1970s, the Forest Service has been shifting policy and management to reflect the need for more public involvement and collaboration (United States History, n.d.-a). While the 1982 Planning Rule allowed for greater public participation in Forest planning processes, there was still more need for stakeholder engagement (US Forest Service, 2016a). As the social and ecological systems that make up National Forests became more and more complex, collaboration has been identified as one tool that could efficiently engage a diverse range of stakeholders (Bacow & Wheeler, 1984). The 2012 Planning Rule mandates the use of collaboration in the plan revision process, evolving the Forest Service's approach to public engagement once again (US Forest Service, n.d.-n).

While documents produced by the federal level of the Forest Service make clear that the agency is intentionally shifting their spectrum of public engagement towards collaboration during planning processes, the specifics of this shift are not defined. Collaboration is a term used broadly to define a spectrum of techniques and methods meant to bring stakeholders together in dialogue. In Chapter 2 of this thesis, I provided an in-depth definition and discussion of factors of best practice collaboration as established

in the literature. However, it should be noted that although these are best practices, each Forest Unit will incorporate aspects of collaboration differently to meet the needs of their region (University of Montana, 2015). In a study conducted by the University of Montana titled *Public Participation: Lessons Learned Implementing the 2012 US Forest Service Planning Rule*, researchers summarized six lessons learned from 12 Forest Unit case studies (2015). These lessons included developing a public participation strategy, managing logistics and expectations, informing and educating the public, using professional facilitators and managing effective public processes, consulting Tribes, and coordinating with local governments (University of Montana, 2015).

Collaboration, in the context of Forest Plan revision process, means bringing together diverse sets of stakeholders in order to build support for and create a forest management plan. In defining collaboration through the synthesis of literature from the field, six factors were identified. In Chapter 2, I identified those factors as:

- Engage Early
- Conduct a Situation Assessment
-Design an Effective Process Based on the Situation Assessment
-Administer an Effective Process
-Meaningfully Engage the Public
-Ensure There Are Sufficient Resources

These themes were drawn from the literature and observation of the field of collaboration. The purpose of developing this set of factors was to create a list that represented agreed upon characteristics of the field, and present them in a way that could be repeatedly used to study land-management planning.

Upon examining the documents produced by the federal level of the Forest Service, it becomes clear that some of the six factors of collaboration appear at great frequency, while others are rarely mentioned. While some of the documents urge Forest Units to engage early with the public, it is never explicitly stated in regard to collaboration, but rather for the planning process as a whole. None of the documents call for the need for an independent situation assessment, which would allow for Forest Units to assess the range of stakeholders to engage, identify shared interests amongst those stakeholders, and develop an effective process for plan revision. However, all of the federally produced documents did mention a need for effective process design. Some documents even called for the use of an external facilitator, but speak far less to the overall administration of a collaborative process.

All three of the federal Forest Service documents mentioned the importance of offering a wide range of opportunities for the public to engage in the plan revision process. Specifically, the documents made clear that Forest Units should not only provide collaboration as a way to get involved, as it might be too time consuming and limit who decides to get involved. The documents all speak to the importance of identifying necessary resources before beginning the process.

The components of best practice collaboration that were most notably missing were the need to get an independent situation assessment, and on a broader scale, the need for a collaboration process to be somewhat standalone with its own process. As noted in Chapter 3, there were some problematic phrases included in these documents in reference to public engagement. These statements and phrases indicate that public engagement is an opportunity for stakeholders and place the burden of involvement onto

the stakeholders.

The documents produced by both Forest Units as part of the planning process have some striking differences to the federal documents. Both documents fail to mention early engagement, although this may be due to early engagement occurring before the creation of these documents, as the context illustrates. While the federal documents did not specify the need for a situation assessment, the Salmon-Challis followed best practices for this process. The Manti-La Sal, however, did not conduct a situation assessment. Nonetheless, the Forest Units provided a generous amount of material referring to effective process design. The Forest Units both mention the administration of collaboration far less frequently than design, which closely follows the pattern of the federal documents. The documents from Salmon-Challis and Manti-La Sal both place heavy emphasis on meaningfully engaging the public and identifying resources, just as the federal documents do.

For successful administration of best practice collaboration to occur in the planning revision processes, a culture of collaboration would need to be adopted by the agency. Additionally, collaboration would need to be used as a stand alone method and carried out through the entirety of the processes. Below I have provided recommendations for the Forest Service based on my analysis of the two Forest Unit processes and federal documents.

4.2 Recommendations

Based on my analysis of collaboration literature, the federal documents regarding planning revision, and the two case studies, I have provided a list of potential

recommendations for the Forest Service regarding collaboration and the plan revision process.

-Clarify and define best practice collaboration in the federal Forest Service documents so that Forest Units have more guidance on this process.

-Continue to collect studies on the successes of public participation and collaboration at Forest Units that have used a high level of these practices during the plan revision process. Give this information to Forest Units just beginning the revision process.

-Give Forest Units ample time to prepare for the plan revision process before initiating phase one to allow for stakeholder assessments and good public participation strategies to develop.

-Give the regional offices guidance on how to effectively and clearly provide support to the Forest Units during the plan revision process. The regional or federal offices should clarify who is responsible for determining certain processes and guidelines.

-Clarify how Forest Units can use third-party facilitators or contract a situation assessment without infringing on the Federal Advisory Committee Act.

-Use language that frames the plan revision process as an opportunity for the Forest Service to work with the public rather than placing the burden of involvement onto the public.

-Develop training for Forest Service personnel on how to facilitate and design collaborative processes.

-Allow for Forest Units to have a year to prepare for the plan revision process

before initiating year 1; recommend that in this year the Forest Unit conducts a situation assessment and begins stakeholder outreach.

-Recognize that collaboration is not the same as public participation, but is a necessary tool in a future with uncertainties such as climate change. Begin to foster a culture of collaboration inside of the agency.

4.3 Limitations and Successes

While this analysis provided a thorough reading of some of the documents produced by the Forest Service in regard to the plan revision process, there were limitations to the research. The 2012 Planning Rule provided a very broad and vague definition of collaboration that did not include a definition of best practice collaboration. Instead, the definition offered in Chapter 2 was produced through an extensive literature review. This means that the content analysis conducted on the Forest Service documents used factors that were established outside of the context of the agency. Additionally, this list of best practice collaboration factors, while comprehensive, has yet to be criticized by the larger fields of collaboration and dispute resolution. Interviews with collaboration experts would be needed to ground these factors in practice.

The content analysis was limited only to the documents that were made available to me through public access and generous contributions made by the Forest Service. While these documents provide a fair amount of context for the planning revision processes, they do not encompass the whole picture. To do a thorough analysis of best practice collaborative factors within the planning revision process, interviews with Forest Service personnel and public stakeholders would need to be conducted. A broader and

more in-depth look at each Forest Unit case would be necessary to determine their full use of collaborative methods.

While there are certainly limitations to this analysis, there were some notable successes as well. The thorough definition of best practice collaborative factors provided in Chapter 2 offers an important contribution to the field of collaboration and dispute resolution. Though there is a significant amount of literature regarding best practices of collaboration and consensus building, the content has not been distilled into factors that can be used to repeatedly conduct case studies. While this list of factors is merely a first attempt at distilling the literature into useable characteristics, it offers a starting place for dialogue to occur. Although the case studies of both Forest Units and the federal Forest are brief and at a surface level, they provide the beginnings of what could be a meaningful comparison between the documents produced at the federal level of the agency, and the actions taken by the Forest Units. Additionally, focusing on two emerging Forest Unit planning processes as case studies provides the structure for longer term analysis of collaboration outcomes in the future.

4.4 Future Research

This analysis serves as the foundational research for what can become long-term case studies and continued development of a comprehensive list of best practice collaborative factors. Following the completion of this thesis, the defined factors will continue to be criticized and shifted through dialogue in the field. By developing this list of best practice collaboration factors, we can begin to use a repeatable method as we examine cases of land-management planning efforts. Prior to the development of these

factors, many studies of the use of collaboration in public land management planning processes were not grounded in factors but left up to broad definitions of the term.

Additionally, the two Forest Unit cases can serve as ongoing studies, which allow for the analysis of outcomes of a collaborative process. The focus of this research was on the inputs of best practice collaboration, and using this study to asses how each Forest Unit did or did not use these factors, we can begin to draw conclusions about which best practice inputs led to significant outputs of best practice collaboration. To do this, outcomes of a best practice collaboration would need to be defined and tested in the same way as the input factors.

With increasingly complex social-ecological systems, and the growing risks that climate change poses, collaborative planning becomes a crucial way to address large scale issues. In addition to collaboration as a tool for solving the challenging issues we face today, building community capacity to collaborate will build resiliency in an uncertain future

REFERENCES

Astley, W. G., & Fombrun, C. (1983). Collective strategy: Social ecology of organizational environments. *Academy of Management Review*, *8*(4), 576-587. Retrieved from http://www.jstor.org/stable/258259.

Bacow, L. S., & Wheeler, M. (1984). *Environmental dispute resolution*. New York, NY: Plenum.

Bernard, H. R., Wutich, A., & Ryan, G. W. (2017). *Analyzing qualitative data: systematic approaches*. Thousand Oaks, CA: SAGE.

Best practices for government agencies: Guidelines for using collaborative agreement-seeking processes. (1997). *Consensus*. Retrieved from http://readingroom.law.gsu.edu/cgi/viewcontent.cgi?article=1008&context=seedgrant.

Bingham, G. (1986). *Resolving environmental disputes: A decade of experience*. Washington, D.C.: Conservation Foundation.

Booher, D. E. (2004). Collaborative governance practices and democracy. *National Civic Review, 93*(4), 32-46. doi: 10.1002/ncr.69.

Brown, L. D. (1980). Planned change in under organized systems. In T.G. Cummings (Ed.), *Systems theory for organization development* (pp. 37-40). New York, NY: Wiley.

Carlson, C. (1999). Convening. In L. Susskind, S. McKearnan, & J. Thomas-Larmer (Eds.), *Consensus building handbook: A comprehensive guide to reaching agreement* (pp. 169-198). Thousand Oaks, CA: Sage.

Carpenter, S. (1999). Choosing appropriate consensus building techniques and strategies. In L. Susskind, S. McKearnan, & J. Thomas-Larmer (Eds.), *Consensus building handbook: A comprehensive guide to reaching agreement* (pp. 61-98*).* Thousand Oaks, CA: Sage.

Carpenter, S. L., & Kenney, W. J. D. (1988). *Managing public disputes: A practical guide to handling conflict and reaching agreements*. San Francisco, CA: Jossey-Bass.

Carr, D. S., Selin, S. W., & Schuett, M. A. (1998). Managing public forests: Understanding the role of collaborative planning. *Environmental Management, 22*(5), 767-776. doi: 10.1007/s002679900146.

Cestero B. (1999). Beyond the hundredth meeting: A field guide to collaborative conservation on the West's public lands. Sonoran Institute, Tucson, AZ. Retrieved from https://sonoraninstitute.org/files/pdf/beyond-the-hundredth-meeting-a-field-guide-to-collaborative-conservation-on-the-wests-public-lands-07011999.pdf.

Cheng, A. S. (2006). Build it and they will come - Mandating collaboration in public lands planning and management. *Natural Resources Journal, 46,* 847-858. Retrieved from http://lawschool.unm.edu/nrj/volumes/46/4/02_cheng_build.pdf.

Cheng, A. S., & Mattor, K. M. (2006). Why won't they come? Stakeholder perspectives on collaborative National Forest planning by participation level. *Environmental Management, 4*(38), 545-561. doi: 10.1007/s00267-005-0124-3.

Chrislip, D., & Larson, C. E. (1994*). Collaborative leadership: How citizens and civic leaders can make a difference*. San Francisco, CA: Jossey-Bass.

Consensus Building Institute. (2001). *How to conduct a conflict assessment.* Retrieved from cbuilding.org

Consensus Building Institute. (2007). *Mutual gains approach to negotiation.* Retrieved from http://www.cbuilding.org/cbis-mutual-gains-approach-negotiation

Crowfoot, J. E., & Wondolleck, J. M. (1990). *Environmental disputes: Community involvement in conflict resolution*. Washington, DC: Island.

Czaika, E., Rumore, D., & Schenk, T., (2017). Finding the factors about joint fact-finding: Criteria and approaches for rigorous evaluation. In M. Matsuura & T. Schenk (Eds.), *Joint-fact finding in urban planning and environmental disputes* (pp. 181-203). New York, NY: Routledge.

Davenport, M.A., Leahy, J. E., Anderson, D. H., & Jakes, P.J. (2007). Building trust in natural resource management within local communities: A case study of the Midewin national tall grass prairie. *Environmental Management, 39*(3), 353-368. doi: 10.1007/s00267- 006-0016-1.

Dockry, M. J. (2015). Looking back to move forward: Collaborative planning to revise the Green Mountain and Finger Lakes National Forests land a resource management plans. *Interdisciplinary Journal of Partnership Studies, 2*(1), 1-17.

Doherty, M. (2015). *Factors of successful collaboration: Oregon's watershed councils as collaborative systems.* Retrieved from

https://www.pdx.edu/npcc/sites/www.pdx.edu.npcc/files/Factors%20of%20Successful%20Collaboration.pdf.

Dunlop, J. T. (1986). A decade of national experience. In J.M. Rosow (Ed.), *Teamwork, joint labor management programs in America* (pp. 13-25). New York, NY: Pergamon Press.

Ehrmann, J. R., & Stinson, B. L. (1999). Joint fact-finding and the use of technical experts. In L. Susskind, S. McKearnan, & J. Thomas-Larmer (Eds.), *Consensus building handbook: A comprehensive guide to reaching agreement* (pp. 375-400). Thousand Oaks, CA: Sage.

Elo, S., & Kyngas, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing, 62*(1), 107-155. doi:10.111/j.1365-2648.2007.04569.x.

Fisher, R., Ury, W., & Patton, B. (1981). *Getting to yes: Negotiating agreement without giving in*. Boston, MA: Houghton Mifflin.

Friend, J. K., & Jessop, W. N. (1969). *Local government and strategic choice*. London, England: Tavistock.

Forbes, L. C. (2004). A vision for cultivating a nation: Gifford Pinchot's the Fight for Conservation. *Organization & Environment, 17*(2), 226-231. doi: 10.1177/1086026603256280.

Forest History. (n.d.-a). *Appendix I: The National Forests of the United States* [webpage]. Retrieved from http://www.foresthistory.org/ASPNET/Places/National%20Forests%20of%20the%20U.S.pdf.

Forest History. (n.d.-b). *Early day, pre-national forest* [webpage]. Retrieved from http://www.foresthistory.org/ASPNET/Publications/region/4/salmon/part1.htm.

Fox, J. R. (1982). *Managing business/government relations: Cases and notes on business/government problems.* Homewood, IL: Irwin.

Golann, D., & Van Loon, E. E. (1999). Legal issues in consensus building. In L. Susskind, S. McKearnan, & J. Thomas-Larmer (Eds.), *Consensus building handbook: A comprehensive guide to reaching agreement* (pp. 495-526*)*. Thousand Oaks, CA: Sage.

Gray, B. (1985). Conditions facilitating inter-organizational collaboration. *Human Relationships*, *38*(10), 911-936. doi: 10.1177/001872678503801001.

Gray, B. (1989). *Collaborating: Finding common ground for multiparty problems*. San Francisco, CA: Jossey-Bass.

Great Old Broads for Wilderness. (n.d.). *Literature repository.* Retrieved from http://www.greatoldbroads.org/pvt-mantilasal/#lit-review.

Hallbrooks, B. A. (2010). *Including collaborative concepts in Forest Service environmental planning.* (Unpublished master's thesis). Virginia Polytechnic Institute and University, Blacksburg, VA.

Hofstede, G. (1980). *Culture's consequences: International differences in work-related values.* Beverly Hills, CA: Safe.

Idaho Conservation League. (n.d.). *Adventures & events.* Retrieved from https://www.idahoconservation.org/events/events/salmon-challis-forest-plan-revision-webinar/.

Innes, J., & Booher, D. (1999). Consensus building as role playing and bricolage: Toward a theory of collaborative planning. *Journal of the American Planning Association, 65*(1), 9-26. doi: 10.1080/01944369908976031.

Innes, J. E., & Booher, D. E. (1999). Consensus building and complex adaptive systems: A framework for evaluating collaborative planning. *Journal of the American Planning Association, 65*(4), 412-423. doi: 10.1080/01944369908976071

Innes, J. E., & Booher, D. E. (2010). *Planning with complexity: An introduction to collaborative rationality for public policy.* New York, NY: Routledge.

International Associations for Public Participation. (2014). *IAP2's public participation strategy.* Retrieved from http://c.ymcdn.com/sites/www.iap2.org/resource/resmgr/foundations_course/IAP2_P2_Spectrum_FINAL.pdf.

Kenney, D. S., McAllister, S. T., Caile, W. H., & Peckham, J. S. (2000). The new watershed source book. *Natural Resources Law Center, University of Colorado School of Law, Boulder, Colorado*. Retrieved from http://scholar.law.colorado.edu/cgi/viewcontent.cgi?article=1031&context=books_repo rts_studies.

Krippendorff, K. (2013). *Content analysis: An introduction to its methodology.* Thousand Oaks, CA: Sage.

Lax, D. A., & Sebenius, J. K. (1986). *The manager as negotiator: Bargaining for cooperation and competitive gain.* New York, NY: The Free Press.

Leach, P., Dutson, T. (2016). How dialogue can help small rural towns navigate planning challenges. *EDR Blog*. Retrieved from https://www.law.utah.edu/how-dialogue-can-help-small-rural-towns-navigate-planning-challenges/

Leach, W.D. (2006). Public involvement in USDA Forest Service policymaking: A literature review. *Journal of Forestry, 104*(1), 43-49. Retrieved from http://www.ingentaconnect.com/contentone/saf/jof/2006/00000104/00000001/art00008.

Leong, M. (n.d.). IAP2 Spectrum of Public Participation (image). Retrieved from https://blog.placespeak.com/how-placespeak-aligns-with-iap2-values/

McCann, J.E. (1983). Design guidelines for social problem-solving interventions. *Journal of Applied Behavioral Sciences*, *19*(2), 177-192. doi: 10.1177/002188638301900213.

McCarthy, J., with Shorett, A. (1984). *Negotiating settlements: A guide to environmental mediation.* New York, NY: American Arbitration Association.

McKearnan, S. (1997). Preliminary step that enhances chance of success. *Mediate.com.* Retrieved from http://www.mediate.com/articles/assessment.cfm.

National Forest Foundation. (n.d.). *Factors influencing successful collaboration.* Retrieved from https://www.nationalforests.org/assets/pdfs/Tool-Factors-Influencing-Successful-Collaboration-Evaluation_NFF.pdf .

National Forest Foundation. (2017). *Manti-La Sal National Forest.* Retrieved from https://www.nationalforests.org/our-forests/find-a-forest/manti-la-sal-national-forest.

National Forest Foundation. (2016a). *Perceptions about opportunities for collaboration during the Salmon-Challis National Forest planning process: Assessment summary & themes*. Unpublished Manuscript.

National Forest Foundation. (2016b). *Opportunities for public engagement in the Salmon-Challis National Forest plan revision process recommendations.* Unpublished Manuscript.

Nie, M., & Metcalf, P. (2015). *The contested use of collaboration & litigation in National Forest management.* Missoula, MT: Bolle Center for People & Forests.

Peterson, T. (n.d.). *Manti-La Sal National Forest.* Retrieved from http://www.grandcanyontrust.org/manti-la-sal-national-forest.

Poirier Elliott, M. L. (1999). The role of facilitators, mediators, and other consensus building practitioners. In L Susskind, S. McKearnan, & J. Thomas-Larmer (Eds.), *Consensus building handbook: A comprehensive guide to reaching agreement* (pp. 199-240). Thousand Oaks, CA: Sage.

Post Register. (2017). Forest Service to revise Salmon-Challis plan. Retrieved from http://www.postregister.com/articles/news-todays-headlines-west/2017/01/27/forest-service-revise-salmon-challis-plan.

Raffia, H. (1962). *The art and science of negotiation.* Cambridge, MA: President and Fellows of Harvard College.

Rolle, S. (2002). Measures of progress for collaboration: Case study of the Applegate Partnership (General Technical Report PNW-GTR-565). Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.

Ruete, E. S. (2000). Facilitation 101. *International Association of Facilitators.* Retrieved from http://amauta-international.com/iaf2000/Ruete.PDF.

Salmon Valley Stewardship. (n.d.). *Community planning.* Retrieved from http://www.salmonvalley.org/what-we-do/community-planning/.

Saunders, H. H. (1985). We need a larger theory of negotiation: The importance of pre-negotiating phases. *Negotiation Journal*, *1*(3), 249-262.

Schenk, T., Vogel, R. A. L., Maas, N., & Tavasszy, L. A. (2016). Joint fact-finding in practice: Review of a collaborative approach to climate-ready infrastructure in Rotterdam. *European Journal of Transport and Infrastructure Research, 16*(1), 273-293. Retrieved from http://www.tbm.tudelft.nl/fileadmin/Faculteit/TBM/Onderzoek/EJTIR/Back_issues/16.1 /2016_01a_10.pdf.

Schermerhorn, J. R. (1975). Determinants of inter-organizational cooperation. *Academy of Management Review*, *18*(4), 846-856. Retrieved from http://www.jstor.org/stable/255382.

Schueet, M.A., Selin S.W., & Carr D.S. (2001). Making it work: Keys to successful collaboration in natural resource management. *Environmental Management, 27*(4), 587-593. doi: 10.1007/s002670010172.

Schreier, M. (2013). *Qualitative content analysis in practice*. Los Angeles, CA: Sage.

Selin, S., & Chevez, D. (1995). Developing a collaborative model for environmental planning and management. *Environmental Management, 19*(2), 189-195. doi: 10.1007/BF02471990.

Selin, S. W., Schueet, M. A., & Carr, D. S. (1997). Has collaborative planning taken root in the National Forests? *Journal of Forestry, 95*(5), 25–28. Retrieved from https://www.researchgate.net/publication/283930409.

Sherman, R. (2016). Manti-La Sal revising its 30-year-old forest plan. *Sun Advocate.* Retrieved from http://www.sunad.com/news/2016/07/manti-lasal-revising-30-

year-old-forest-plan/.

Society of Professionals in Dispute Resolution. (1997). Best practices for government agencies: Guidelines for using collaborative agreement-seeking process. Washington, DC.

Stanfield, B. (1999). Magic of the facilitator. *ICA associates.* Retrieved from http://www.top-network.org/assets/TN_Resource_Library/magic%20of%20the%20facilitator%20by%20brian%20stanfield.pdf.

Stemier, S. (2001). An overview of content analysis. *Practical Assessment, Research & Evaluation, 7*(17). Retrieved from http://PAREonline.net/getvn.asp?v=7&n=17 .

Straus, D. A. (1999). Managing meetings to build consensus. In L. Susskind, S. McKearnan, & J. Thomas-Larmer (Eds.), *Consensus building handbook: A comprehensive guide to reaching agreement* (pp. 287-324). Thousand Oaks, CA: Sage.

Susskind, L., Camacho, A. E., & Schenk, T. (2011). A critical assessment of collaborative adaptive management in practice. *Journal of Applied Ecology, 49*(1), 47-51. doi: 10.1111/j.1365-2664.2011.02070.x.

Susskind, L. E., & Cruikshank, J. (1987). *Breaking the impasse*. New York, NY: Basic Books.

Susskind, L., McKearnan, S., & Thomas-Larmer, J. (Eds.) (1999). *The consensus building handbook: A comprehensive guide to reaching agreement.* Thousand Oaks, CA: Sage.

Susskind, L., & Madigan, D. (1984). New approaches to resolving disputes in the public sector. *Just System Journal*, *9*(2), 197-203.

Susskind, L., & Thomas-Larmer, J. (1999). Conducting a conflict assessment. In L Susskind, S. McKearnan, & J. Thomas-Larmer (Eds.), *Consensus building handbook: A comprehensive guide to reaching agreement* (pp. 99-136). Thousand Oaks, CA: Sage.

Thayer-Hart, N. (2007). Facilitator tool kit: A guide for helping groups get results. *Office of Quality Improvement, University of Wisconsin-Madison.* Retrieved from http://oqi.wisc.edu/resourcelibrary/uploads/resources/Facilitator%20Tool%20Kit.Pdf.

The Center for Regulatory Effectiveness. (n.d.). *National Forest Management Act of 1976.* Retrieved from http://www.thecre.com/fedlaw/legal14/nfma.htm.

The Challis Messenger. (2017). SCNF hosts Forest Plan meeting in Arco. Retrieved from http://www.challismessenger.com/articles/2017/03/23/scnf-hosts-forest-plan-meeting-arco.

Travis, M.C. (2009). Collaborative processes under NEPA: Are we there yet? *Natural Resources and Environment, 23*(4), 36-38, 59. Retrieved from www.jstor.org/stable/40925046.

Trenbeath, E. (2016). Officials announce revision to Forest Plan. *Moab Sun News.* Retrieved form http://www.moabsunnews.com/news/article_834a73e0-43a8-11e6-a8af-ef0c99f95d3b.html

Trist, E. L. (1977). A concept of organizational ecology. *Australian Journal of Management*, *2*(2), 162-175. doi: 10.1177/031289627700200205.

United States Senate, Committee on Agriculture, Nutrition, and Forestry. (1979). *Compilation of the Forest and Rangeland Renewable Resource Act of 1974.* Retrieved from https://babel.hathitrust.org/cgi/pt?id=umn.31951d002911127;view=1up;seq=3.

US Department of Justice. (2015). *The timber wars.* Retrieved from https://www.justice.gov/enrd/timber-wars.

US Forest Service. (1976). 16 U.S.C. 1600(note) National Forest Management Act of 1976. Retrieved from https://www.fs.fed.us/emc/nfma/includes/NFMA1976.pdf.

US Forest Service. (2009). *History of the Challis National Forest: A compilation.* (R4-1680-2006-0238.) Retrieved from https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsbdev3_042166.pdf.

US Forest Service. (2012). 36 CFR Part 219 National Forest System Land Management Planning. Federal Register / Vol. 77, No 68. Retrieved From https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5362536.pdf.

US Forest Service. (2016a). *Citizen's guide to National Forest planning: Prepared by the Federal Advisory Committee on implementation of the 2012 Land Management Planning Rule.* Retrieved from https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd520670.pdf.

US Forest Service. (2016b). *Manti-La Sal National Forest Plan Revision Communication Plan.* Retrieved from https://drive.google.com/file/d/0B05zlfuaVok-VTFxMjBjN0FTV1E/view.

US Forest Service. (2016c). *Manti-La Sal National Forest Plan Revision Public Participation Strategy.* Retrieved from https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd535174.pdf.

US Forest Service. (2016d). *Salmon-Challis National Forest plan revision public participation strategy.* Retrieved from https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd538738.pdf

US Forest Service. (2017). *Forest Plan Revision communication strategy.* Retrieved from https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd536452.pdf.

US Forest Service. (n.d.-a). *About the Forest* [webpage]. Retrieved from https://www.fs.usda.gov/main/scnf/about-forest.

US Forest Service. (n.d.-b). *Collaboration & public involvement* [webpage]. Retrieved from https://www.fs.usda.gov/main/planningrule/collaboration.

US Forest Service. (n.d.-c). *Forest Plan Revision* [webpage]. Retrieved from https://www.fs.usda.gov/detail/scnf/home/?cid=FSEPRD522039.

US Forest Service. (n.d.-d). *Forest Plan Revision mainpage* [webpage]. Retrieved from https://www.fs.usda.gov/detail/mantilasal/landmanagement/planning/?cid=fseprd509713.

US Forest Service. (n.d.-e). *Forest Service regions* [webpage]. Retrieved from https://www.fs.fed.us/wildflowers/regions/.

US Forest Service. (n.d.-f). *History & culture* [webpage]. Retrieved from https://www.fs.usda.gov/main/mantilasal/learning/history-culture.

US Forest Service. (n.d.-g). *History of forest planning* [webpage]. Retrieved from https://www.fs.usda.gov/main/planningrule/history.

US Forest Service. (n.d.-h). *History of the forest* [webpage]. Retrieved from https://www.fs.usda.gov/detail/ashley/learning/history-culture/?cid=STELPRDB5123073.

US Forest Service. (n.d.-i). *Intermountain region* [webpage]. Retrieved from https://www.fs.fed.us/wildflowers/regions/intermountain/index.php.

US Forest Service. (n.d.-j). *Intermountain Region Forest Plan Revision: Managing public lands with a 21st century vision* [webpage]. Retrieved from https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd523008.pdf.

US Forest Service. (2015). *Land management planning handbook* [webpage]. Retrieved from https://www.fs.fed.us/dirindexhome/fsh/1909.12/wo_1909.12_40.docx.

US Forest Service. (n.d.-k). *Lewis & Clark* [webpage]. Retrieved from https://www.fs.usda.gov/detail/scnf/learning/history-

culture/?cid=fsbdev3_029653.

US Forest Service. (n.d.-l). *Our history* [webpage]. Retrieved from https://www.fs.fed.us/learn/our-history.

US Forest Service. (n.d.-m). *Overall collaboration and public involvement* [webpage]. Retrieved from https://www.fs.usda.gov/detail/planningrule/collaboration/?cid=STELPRDB5136341.

US Forest Service. (n.d.-n). *Planning* [webpage]. Retrieved from https://www.fs.usda.gov/detailfull/r4/landmanagement/planning/?cid=FSEPRD522028&width=full.

US Forest Service. (n.d.-o). *Public involvement opportunities* [webpage]. Retrieved from https://www.fs.usda.gov/detail/scnf/landmanagement/planning/?cid=FSEPRD531751.

US Forest Service. (n.d.-p) *Public Participation Strategy Outline*. Unpublished manuscript.

US General Accounting Office. (1996). *Content Analysis: A Methodology for Structuring and Analyzing Written Material.* GAO/PEMD-10.3.1. Washington, D.C.

United States History. (n.d.-a). *National Forest Management Act.* Retrieved from http://www.u-s-history.com/pages/h1604.html.

United States History. (n.d.-b). *U.S. Forest Service.* Retrieved from http://www.u-s-history.com/pages/h1602.html

Utah.com. (2017 31). *Manti-La Sal National Forest.* Retrieved from https://utah.com/manti-la-sal.

Vickers, Sir. G. (1965). *The art of judgment: A study of policy making*. London, England: Chapman and Hall.

Waddock, S. A. (1989). Understanding social partnerships: An evolutionary model of partnership organizations. *Administration and Society, 21*(1), 78-100. doi: 10.1177/009539978902100105.

Weber, R.P. (1990). *Basic content analysis* (2nd ed.). Newbury Park, CA: Sage Publications.

Wondolleck, J. (1985). The importance of process in resolving environmental disputes. *Environmental Impact Assessment Review*, *5*(4), 341-356. doi: 10.1016/0195-9255(85)90028-9.

Wondolleck, J. M., & Yaffee, S. L. (2000). *Making collaboration work: Lessons from innovation in natural resource management.* Washington, DC: Island Press.